

# SCHEMATIC DIAGRAM PARTS LIST P.C. BOARD

# KENWOOD

## PD110-3(D) PD110-5(D)

# Constant-Voltage Current Power Supply

## PARTS LIST

### MAIN CHASSIS (PD110-3)

Y86-1320-61

REF. NO	PARTS NO	NAME & DESCRIPTION
	A01-1152-03	CASE
	A10-1446-22	CHASSIS
	A20-2794-05	PANEL (DIECAST)
	A21-1081-03	DECORATIVE PANEL
	B07-0713-04	ESCUTCHEON
	B31-0730-05	METER
	B40-2765-04	NAME PLATE (SERIAL NO)
	B40-2885-03	NAME PLATE
	B41-0627-14	CAUTION LABEL (LINE VOL)
	B41-0792-04	CAUTION LABEL
	B50-7586-20	INSTRUCTION MANUAL
	E18-0363-05	INLET SOCKET
	E20-0491-05	TERMINAL BLOCK 4P
	E20-1291-15	TERMINAL BLOCK 12P
	E21-0653-03	TERMINAL (BLUE)
	E21-0665-03	TERMINAL (GRAY)
	E21-0666-03	TERMINAL (RED)
	E23-0541-05	EARTH LUG
	E23-0542-05	EARTH LUG
	E29-0506-04	SHORTING BAR (PANEL)
	E29-0536-14	SHORTING BAR (CONTROL TERM.)
	E29-0537-14	SHORTING BAR (REAR OUT PUT)
	E30-1819-05	CEE CORD
	E31-2783-05	LEAD WIRE WITH CONNECTOR
	E33-4116-00	WIRE ASSY
	F01-0853-14	HEAT SINK
	F01-0854-34	HEAT SINK
	F04-5021-05	FUSE
	F19-0712-05	CAP FOR DP-652
	F20-0657-25	INSULATOR
	H01-5825-14	CARTON BOX
	H10-2823-12	FOAMED STYRENE PAD (F)
	H10-2824-12	FOAMED STYRENE PAD (R)
	H21-0806-04	PROTECTION SHEET (SET)
	H21-0831-14	PROTECTION SHEET (AC CORD)
	H25-0029-04	POLYETHYLENE BAG (FUSE)
	J02-0049-14	LEG
	J11-0504-05	CLAMPER
	J11-0507-05	CABLE CLAMP
	J13-0506-05	FUSE HOLDER
	J21-0392-04	HOLDER FOR OUTPUT LEAD
	J21-2912-05	HOLDER FOR LED
	J21-2948-04	BRACKET
	J21-2949-04	BRACKET
	J21-4557-04	BRACKET (FOR TRANSISTOR)
	J21-4558-04	BRACKET (FOR TRANSISTOR)
	J21-4559-14	BRACKET (FOR HEAT SINK)
	J21-4560-04	BRACKET (FOR HEAT SINK)
	J21-4561-04	BRACKET (FOR METER)
	J21-4570-23	BRACKET (FOR PCB)
	J32-0876-05	BOSS
	J61-0049-05	WIRE BAND
	J61-0525-05	WIRE WRAPPING BAND
	J61-0526-05	BOARD SUPPORT

REF. NO	PARTS NO	NAME & DESCRIPTION
	K01-0410-05	HANDLE
	K21-0877-13	KNOB
	K27-0528-14	KNOB
	N09-0623-04	SCREW M 3X8
	N09-0626-04	SCREW M 3X10
	N09-0654-05	SCREW M 4X8
	N09-0704-05	SCREW
	N09-0711-05	SCREW
	N09-0723-05	SCREW M 5X10
	N09-0725-15	SCREW M 4X12
	N09-0732-05	SCREW M 5X8
	N14-0404-04	NUT
	N14-0620-05	NUT
	N19-0717-05	WASHER NONMETAL AC310
	N19-0726-04	WASHER
	N30-4016-41	SCREW, PAN HD M 4X16
	N32-3006-41	SCREW, FLAT HD M 3X6
	N33-4008-41	SCREW M 2.6X5
	N88-4012-41	SCREW, FLAT HD TAP TITE
	N89-3008-41	SCREW, BINDING TAP TITE
	N89-3012-41	SCREW, BINDING TAP TITE
	N89-3014-41	SCREW, BINDING TAP TITE
	N89-4014-41	SCREW, BINDING TAP TITE
	S51-1518-05	THERMAL SENSOR
	T40-0405-05	INDUCTION MOTOR
	X73-1690-01	AMPLIFIER UNIT
	X77-1400-04	AMPLIFIER UNIT
	X81-1850-04	CURRENT DIPECTER UNIT
	X81-1980-11	CONSTANT I UNIT
	X81-2110-01	RECTIFIER UNIT
	001-0501-05	COATING WIRE
	212-1018-05	TUBE (PLASTIC)
	212-3017-05	TUBE (PLASTIC)
C001	C90-0966-05	CAP. ELECTRO 2200 160V
C002	C90-0968-05	CAP. ELECTRO 100 160V
C003	C90-0961-05	CAP. ELECTRO 660 2 0% 63V
C004	C91-1243-05	CAP. CERAMIC 0.47 1 0% 250V
C005	C90-0961-05	CAP. ELECTRO 660 2 0% 63V
C006	E31-2686-05	SPARK KILLER ASSY
C007	C91-1243-05	CAP. CERAMIC 0.47 1 0% 250V
C010	CE04W1E101M	CAP. ELECTRO 100 2 0% 25V
C011	CE04W1E101M	CAP. ELECTRO 100 2 0% 25V
D001	S10VB60	ROTARY SWITCH
D002	CR09G	THYRISTOR 0P 0V
D008	E31-2517-05	LEAD WIRE WITH CONNECTOR
D009	E31-2517-05	LEAD WIRE WITH CONNECTOR
D010	E31-2518-05	LEAD WIRE WITH CONNECTOR
D011	TNR15G431K	VARISTOR
P001	E31-2784-05	LEAD WIRE WITH CONNECTOR
P002	E31-2784-05	LEAD WIRE WITH CONNECTOR
P003	E31-2607-05	LEAD WIRE WITH CONNECTOR
P004	E31-2606-05	LEAD WIRE WITH CONNECTOR
P005	E31-2514-05	LEAD WIRE WITH CONNECTOR

# PARTS LIST

REF.NO	PARTS NO	NAME & DESCRIPTION
P009	E31-2514-05	LEAD WIRE WITH CONNECTOR
P010	E31-2517-05	LEAD WIRE WITH CONNECTOR
P011	E31-2517-05	LEAD WIRE WITH CONNECTOR
P012	E31-2518-05	LEAD WIRE WITH CONNECTOR
P309	E31-2751-05	LEAD WIRE WITH CONNECTOR
R014	R92-1187-05	RES. FIXED
R020	R92-1176-05	RES. FIXED
R051	RN14BK2E9103F	RES. METAL FILM 910K 1% 1/4W
R052	RN14BK2E9103F	RES. METAL FILM 910K 1% 1/4W
S001	S59-1502-05	SWITCH (CIRCUIT PROTECTOR)
T001	L01-9656-05	POWER TRANSFORMER
T002	L15-0412-05	INDUCTOR
VR001	R29-0505-05	V.R. 10K
VR002	R05-3511-05	V.R. 500 B

## MAIN CHASSIS (PD110-3D) Y86-1330-61

REF.NO	PARTS NO	NAME & DESCRIPTION
	A01-1152-03	CASE
	A10-1446-22	CHASSIS
	A20-2794-05	PANEL (DIECAST)
	A21-1088-03	DECORATIVE PANEL
	B07-0713-04	ESCUTCHEON
	B19-0738-13	FILTER
	B40-2765-04	NAME PLATE (SERIAL NO)
	B40-2887-03	NAME PLATE
	B41-0627-14	CAUTION LABEL (LINE VOL)
	B41-0792-04	CAUTION LABEL
	B50-7586-20	INSTRUCTION MANUAL
	E18-0363-05	INLET SOCKET
	E20-0491-05	TERMINAL BLOCK 4P
	E20-1291-15	TERMINAL BLOCK 12P
	E21-0653-03	TERMINAL (BLUE)
	E21-0665-03	TERMINAL (GLAY)
	E21-0666-03	TERMINAL (RED)
	E23-0541-05	EARTH LUG
	E23-0542-05	EARTH LUG
	E29-0506-04	SHORTING BAR (PANEL)
	E29-0536-14	SHORTING BAR (CONTROL TERM.)
	E29-0537-14	SHORTING BAR (REAR OUT PUT)
	E30-1819-05	CEE CORD
	E31-2783-05	LEAD WIRE WITH CONNECTOR
	E33-4116-00	WIRE ASSY
	F01-0853-14	HEAT SINK
	F01-0854-34	HEAT SINK
	F04-5021-05	FUSE
	F07-0928-05	COVER
	F19-0712-05	CAP FOR DP-652
	F20-0647-05	INSULATOR
	F20-0657-25	INSULATOR
	H01-5827-14	CARTON BOX
	H10-2823-12	FOAMED STYRENE PAD (F)
	H10-2824-12	FOAMED STYRENE PAD (R)
	H21-0806-04	PROTECTION SHEET (SET)
	H21-0831-14	PROTECTION SHEET (AC CORD)
	H25-0029-04	POLYETHYLENE BAG (FUSE)
	J02-0049-14	LEG
	J11-0504-05	CLAMPER
	J11-0507-05	CABLE CLAMP
	J13-0506-05	FUSE HOLDER
	J19-1620-05	CORD CLAMP
	J21-0392-04	HOLDER FOR OUTPUT LEAD
	J21-2912-05	HOLDER FOR LED
	J21-2948-04	BRACKET
	J21-2949-04	BRACKET
	J21-4513-03	BRACKET FOR PCB
	J21-4557-04	BRACKET (FOR TRANSISTOR)
	J21-4558-04	BRACKET (FOR TRANSISTOR)
	J21-4559-14	BRACKET (FOR HEAT SINK)
	J21-4560-04	BRACKET (FOR HEAT SINK)
	J21-4570-23	BRACKET (FOR PCB)
	J32-0876-05	BOSS
	J61-0049-05	WIRE BAND
	J61-0525-05	WIRE WRAPPING BAND
	J61-0526-05	BOARD SUPPORT

REF.NO	PARTS NO	NAME & DESCRIPTION
	K01-0410-05	HANDLE
	K21-0877-13	KNOB
	K27-0528-14	KNOB
	N09-0623-04	SCREW M 3X8
	N09-0626-04	SCREW M 3X10
	N09-0654-05	SCREW M 4X8
	N09-0704-05	SCREW
	N09-0711-05	SCREW
	N09-0723-05	SCREW M 5X10
	N09-0725-15	SCREW M 4X12
	N09-0732-05	SCREW M 5X8
	N14-0404-04	NUT
	N14-0620-05	NUT
	N19-0191-05	WASHER NONMETAL
	N19-0717-05	WASHER NONMETAL AC310
	N19-0726-04	WASHER
	N32-3006-41	SCREW, FLAT HD M 3X6
	N32-3008-41	SCREW, FLAT HD M 3X8
	N33-4008-41	SCREW M 2.6X5
	N88-4012-41	SCREW, FLAT HD TAP TITE
	N89-3008-41	SCREW, BINDING TAP TITE
	N89-3012-41	SCREW, BINDING TAP TITE
	N89-3014-41	SCREW, BINDING TAP TITE
	N89-4014-41	SCREW, BINDING TAP TITE
	S51-1518-05	THERMAL SENSOR
	T40-0405-05	INDUCTION MOTOR
	X73-1700-01	AMPLIFIER UNIT
	X76-1260-11	DIGITAL PANEL METER UNIT
	X77-1400-04	AMPLIFIER UNIT
	X81-1850-05	CURRENT DIFECTOR UNIT
	X81-1980-11	CONSTANT.I UNIT
	X81-2110-01	RECTIFIER UNIT
	001-0501-05	COATING WIRE
	212-1018-05	TUBE (PLASTIC)
	212-3017-05	TUBE (PLASTIC)
C001	C90-0966-05	CAP. ELECTRO 2200 160V
C002	C90-0968-05	CAP. ELECTRO 100 160V
C003	C90-0961-05	CAP. ELECTRO 660 20% 63V
C004	C91-1243-05	CAP. CERAMIC 0.47 10% 250V
C005	C90-0961-05	CAP. ELECTRO 660 20% 63V
C006	E31-2686-05	SPARK KILLER A' SSS
C007	C91-1243-05	CAP. CERAMIC 0.47 10% 250V
C010	CE04W1E101M	CAP. ELECTRO 100 20% 25V
C011	CE04W1E101M	CAP. ELECTRO 100 20% 25V
D001	E31-2518-05	LEAD WIRE WITH CONNECTOR
D001	S10VB60	ROTARY SWITCH
D002	CR09G	THYRISTOR 0P 0V
D008	E31-2517-05	LEAD WIRE WITH CONNECTOR
D009	E31-2517-05	LEAD WIRE WITH CONNECTOR
D010	NO USE	
D011	TNR15G431K	VARISTOR
P001	E31-2784-05	LEAD WIRE WITH CONNECTOR
P002	E31-2784-05	LEAD WIRE WITH CONNECTOR
P005	E31-2514-05	LEAD WIRE WITH CONNCTOR
P009	E31-2514-05	LEAD WIRE WITH CONNCTOR
P010	E31-2517-05	LEAD WIRE WITH CONNECTOR
P011	E31-2517-05	LEAD WIRE WITH CONNECTOR
P012	E31-2518-05	LEAD WIRE WITH CONNECTOR
P201	E31-2519-05	LEAD WIRE A' SSS IC, TRANSFORMER
P202	E31-2519-05	LEAD WIRE A' SSS IC, TRANSFORMER
P203	E31-2519-05	LEAD WIRE A' SSS IC, TRANSFORMER
P204	NO USE	
P205	E31-2756-05	LEAD WIRE WITH CONNECTOR
P309	E31-2751-05	LEAD WIRE WITH CONNECTOR
R014	R92-1187-05	RES. FIXED
R020	R92-1176-05	RES. FIXED
R051	RN14BK2E9103F	RES. METAL FILM 910K 1% 1/4W
R052	RN14BK2E9103F	RES. METAL FILM 910K 1% 1/4W
S001	S59-1502-05	SWITCH (CIRCUIT PROTECTOR)
T001	L01-9656-05	POWER TRANSFORMER
T002	L15-0412-05	INDUCTOR

# PARTS LIST

REF.NO	PARTS NO	NAME & DESCRIPTION
U203	UPC7805H	IC, VOLTAGE REGULATOR
U204	UPC7805H	IC, VOLTAGE REGULATOR

VR001	R29-0505-05	V.R.	10K
VR002	R05-3511-05	V.R.	500 B

## MAIN CHASSIS (PD110-5)

### Y86-1300-61

REF.NO	PARTS NO	NAME & DESCRIPTION
	A01-1164-13	CASE
	A10-1448-12	CHASSIS
	A20-2794-05	PANEL (DIECAST)
	A21-1081-03	DECORATIVE PANEL
	B07-0713-04	ESCUTCHEON
	B31-0734-05	METER
	B40-2765-04	NAME PLATE (SERIAL NO)
	B40-2881-03	NAME PLATE
	B41-0627-14	CAUTION LABEL (LINE VOL)
	B41-0791-04	CAUTION LABEL (FUSE)
	B50-7586-20	INSTRUCTION MANUAL
	E18-0363-05	INLET SOCKET
	E20-0491-05	TERMINAL BLOCK 4P
	E20-1291-15	TERMINAL BLOCK 12P
	E21-0653-03	TERMINAL (BULE)
	E21-0665-03	TERMINAL (GLAY)
	E21-0666-03	TERMINAL (RED)
	E23-0541-05	EARTH LUG
	E23-0542-05	EARTH LUG
	E29-0506-04	SHORTING BAR (PANEL)
	E29-0536-14	SHORTING BAR (CONTROL TERM.)
	E29-0537-14	SHORTING BAR (REAR OUT PUT)
	E30-1819-05	CEE CORD
	E31-2780-05	LEAD WIRE WITH CONNECTOR
	E33-4116-00	WIRE ASSY
	F01-0853-14	HEAT SINK
	F01-0854-34	HEAT SINK
	F06-8023-05	FUSE (8A)
	F19-0712-05	CAP FOR DP-652
	F20-0625-04	INSULATOR
	F20-0657-25	INSULATOR
	H01-5821-14	CARTON BOX
	H10-2823-12	FOAMED STYRENE PAD (F)
	H10-2824-12	FOAMED STYRENE PAD (R)
	H21-0806-04	PROTECTION SHEET (SET)
	H21-0831-14	PROTECTION SHEET (AC CORD)
	H25-0029-04	POLYETHYLENE BAG (FUSE)
	J02-0049-14	LEG
	J11-0504-05	CLAMPER
	J11-0507-05	CABLE CLAMP
	J13-0506-05	FUSE HOLDER
	J21-0392-04	HOLDER FOR OUTPUT LEAD
	J21-2912-05	HOLDER FOR LED
	J21-2948-04	BRACKET
	J21-2949-04	BRACKET
	J21-4557-04	BRACKET (FOR TRANSISTOR)
	J21-4558-04	BRACKET (FOR TRANSISTOR)
	J21-4559-14	BRACKET (FOR HEAT SINK)
	J21-4560-04	BRACKET (FOR HEAT SINK)
	J21-4561-04	BRACKET (FOR METER)
	J21-4570-23	BRACKET (FOR PCB)
	J32-0876-05	BOSS
	J32-0877-05	BOSS
	J61-0049-05	WIRE BAND
	J61-0525-05	WIRE WRAPPING BAND
	J61-0526-05	BOARD SUPPORT
	K01-0409-05	HANDLE
	K21-0877-03	KNOB
	K27-0528-14	KNOB
	N09-0623-04	SCREW M 3X8
	N09-0626-04	SCREW M 3X10
	N09-0654-05	SCREW M 4X8
	N09-0704-05	SCREW
	N09-0711-05	SCREW
	N09-0723-05	SCREW M 5X10
	N09-0725-15	SCREW M 4X12
	N09-0732-05	SCREW M 5X8
	N14-0404-04	NUT
	N14-0620-05	NUT
	N19-0717-05	WASHER NONMETAL AC310
	N19-0726-04	WASHER
	N30-4016-41	SCREW, PAN HD M 4X16
	N32-3006-41	SCREW, FLAT HD M 3X6

REF.NO	PARTS NO	NAME & DESCRIPTION
	N33-4008-41	SCREW M 2.6X5
	N88-4012-41	SCREW, FLAT HD TAP TITE
	N89-3008-41	SCREW, BINDING TAP TITE
	N89-3012-41	SCREW, BINDING TAP TITE
	N89-3014-41	SCREW, BINDING TAP TITE
	N89-4014-41	SCREW, BINDING TAP TITE
	S51-1518-05	THERMAL SENSOR
	T40-0405-05	INDUCTION MOTOR
	X73-1690-01	AMPLIFIER UNIT
	X77-1400-04	AMPLIFIER UNIT
	X81-1850-02	CURRENT DIPECTER UNIT
	X81-1980-09	CONSTANT.I UNIT
	X81-2110-00	RECTIFIER UNIT
	001-0501-05	COATING WIRE
	212-1018-05	TUBE (PLASTIC)
	212-3017-05	TUBE (PLASTIC)
C001	C90-0963-05	CAP. ELECTRO 3300 160V
C002	C90-0968-05	CAP. ELECTRO 100 160V
C003	C90-0961-05	CAP. ELECTRO 660 20% 63V
C004	C91-1243-05	CAP. CERAMIC 0.47 10% 250V
C005	C90-0961-05	CAP. ELECTRO 660 20% 63V
C006	E31-2686-05	SPARK KILLER A'SSY
C007	C91-1243-05	CAP. CERAMIC 0.47 10% 250V
C010	CE04W1E101M	CAP. ELECTRO 100 20% 25V
C011	CE04W1E101M	CAP. ELECTRO 100 20% 25V
D001	S10VB60	ROTARY SWITCH
D002	CR09G	THYRISTOR 0P 0V
D008	E31-2517-05	LEAD WIRE WITH CONNECTOR
D009	E31-2517-05	LEAD WIRE WITH CONNECTOR
D010	E31-2518-05	LEAD WIRE WITH CONNECTOR
D011	TNR15G431K	VARISTOR
P001	E31-2781-05	LEAD WIRE WITH CONNECTOR
P002	E31-2781-05	LEAD WIRE WITH CONNECTOR
P003	E31-2607-05	LEAD WIRE WITH CONNECTOR
P004	E31-2606-05	LEAD WIRE WITH CONNECTOR
P005	E31-2514-05	LEAD WIRE WITH CONNECTOR
P009	E31-2514-05	LEAD WIRE WITH CONNECTOR
P010	E31-2517-05	LEAD WIRE WITH CONNECTOR
P011	E31-2517-05	LEAD WIRE WITH CONNECTOR
P012	E31-2518-05	LEAD WIRE WITH CONNECTOR
P309	E31-2751-05	LEAD WIRE WITH CONNECTOR
R014	R92-1187-05	RES. FIXED
R020	R92-1176-05	RES. FIXED
R051	RN14BK2E9103F	RES. METAL FILM 910K 1% 1/4W
R052	RN14BK2E9103F	RES. METAL FILM 910K 1% 1/4W
S001	S59-1502-05	SWITCH (CIRCUIT PROTECTOR)
T001	L01-9646-05	POWER TRANSFORMER
T002	L15-0411-05	INDUCTOR
VR001	R29-0505-05	V.R. 10K
VR002	R05-3511-05	V.R. 500 B

## MAIN CHASSIS (PD110-5D)

### Y86-1310-61

REF.NO	PARTS NO	NAME & DESCRIPTION
	A01-1164-13	CASE
	A10-1448-12	CHASSIS
	A20-2794-05	PANEL (DIECAST)
	A21-1088-03	DECORATIVE PANEL
	B07-0713-04	ESCUTCHEON
	B19-0738-13	FILTER
	B40-2765-04	NAME PLATE (SERIAL NO)
	B40-2883-03	NAME PLATE
	B41-0627-14	CAUTION LABEL (LINE VOL)
	B41-0791-04	CAUTION LABEL (FUSE)
	B50-7586-20	INSTRUCTION MANUAL
	E18-0363-05	INLET SOCKET
	E20-0491-05	TERMINAL BLOCK 4P
	E20-1291-15	TERMINAL BLOCK 12P
	E21-0653-03	TERMINAL (BULE)
	E21-0665-03	TERMINAL (GLAY)
	E21-0666-03	TERMINAL (RED)

# PARTS LIST

REF.NO	PARTS NO	NAME & DESCRIPTION
	E23-0541-05	EARTH LUG
	E23-0542-05	EARTH LUG
	E29-0506-04	SHORTING BAR (PANEL)
	E29-0536-14	SHORTING BAR (CONTROL TERM.)
	E29-0537-14	SHORTING BAR (REAR OUT PUT)
	E30-1819-05	CEE CORD
	E31-2780-05	LEAD WIRE WITH CONNECTOR
	E33-4116-00	WIRE ASSY
	F01-0853-14	HEAT SINK
	F01-0854-34	HEAT SINK
	F06-8023-05	FUSE (8A)
	F07-0928-05	COVER
	F19-0712-05	CAP FOR DP-652
	F20-0625-04	INSULATOR
	F20-0647-05	INSULATOR
	F20-0657-25	INSULATOR
	H01-5823-14	CARTON BOX
	H10-2823-12	FOAMED STYRENE PAD (P)
	H10-2824-12	FOAMED STYRENE PAD (R)
	H21-0806-04	PROTECTION SHEET (SET)
	H21-0831-14	PROTECTION SHEET (AC CORD)
	H25-0029-04	POLYETHYLENE BAG (FUSE)
	J02-0049-14	LEG
	J11-0504-05	CLAMPER
	J11-0507-05	CABLE CLAMP
	J13-0506-05	FUSE HOLDER
	J19-1620-05	CORD CLAMP
	J21-0392-04	HOLDER FOR OUTPUT LEAD
	J21-2912-05	HOLDER FOR LED
	J21-2948-04	BRACKET
	J21-2949-04	BRACKET
	J21-4513-03	BRACKET FOR PCB
	J21-4557-04	BRACKET (FOR TRANSISTOR)
	J21-4558-04	BRACKET (FOR TRANSISTOR)
	J21-4559-14	BRACKET (FOR HEAT SINK)
	J21-4560-04	BRACKET (FOR HEAT SINK)
	J21-4570-23	BRACKET (FOR PCB)
	J32-0876-05	BOSS
	J32-0877-05	BOSS
	J61-0049-05	WIRE BAND
	J61-0525-05	WIRE WRAPPING BAND
	J61-0526-05	BOARD SUPPORT
	K01-0409-05	HANDLE
	K21-0877-13	KNOB
	K27-0528-14	KNOB
	N09-0623-04	SCREW M 3X8
	N09-0626-04	SCREW M 3X10
	N09-0654-05	SCREW M 4X8
	N09-0704-05	SCREW
	N09-0711-05	SCREW
	N09-0723-05	SCREW M 5X10
	N09-0725-15	SCREW M 4X12
	N09-0732-05	SCREW M 5X8
	N14-0404-04	NUT
	N14-0620-05	NUT
	N19-0191-05	WASHER NONMETAL
	N19-0717-05	WASHER NONMETAL AC310
	N19-0726-04	WASHER
	N32-3006-41	SCREW, FLAT HD M 3X6
	N32-3008-41	SCREW, FLAT HD M 3X8
	N33-4008-41	SCREW M 2.6X5
	N88-4012-41	SCREW, FLAT HD TAP TITE
	N89-3008-41	SCREW, BINDING TAP TITE
	N89-3012-41	SCREW, BINDING TAP TITE
	N89-3014-41	SCREW, BINDING TAP TITE
	N89-4014-41	SCREW, BINDING TAP TITE
	S51-1518-05	THERMAL SENSOR
	T40-0405-05	INDUCTION MOTOR
	X73-1700-01	AMPLIFIER UNIT
	X76-1260-09	DIGITAL PANEL METER UNIT
	X77-1400-04	AMPLIFIER UNIT
	X81-1850-03	CURRENT DIFECTOR UNIT
	X81-1980-09	CONSTANT.I UNIT
	X81-2110-00	RECTIFIER UNIT
	001-0501-05	COATING WIRE
	212-1018-05	TUBE (PLASTIC)
	212-3017-05	TUBE (PLASTIC)
C001	C90-0963-05	CAP. ELECTRO 3300 160V
C002	C90-0968-05	CAP. ELECTRO 100 160V
C003	C90-0961-05	CAP. ELECTRO 660 20% 63V
C004	C91-1243-05	CAP. CERAMIC 0.47 10% 250V
C005	C90-0961-05	CAP. ELECTRO 660 20% 63V
C006	E31-2686-05	SPARK KILLER A'SSY
C007	C91-1243-05	CAP. CERAMIC 0.47 10% 250V
C010	CE04W1E101M	CAP. ELECTRO 100 20% 25V

REF.NO	PARTS NO	NAME & DESCRIPTION
C011	CE04W1E101M	CAP. ELECTRO 100 20% 25V
D001	S10VB60	ROTARY SWITCH
D002	CR09G	THYRISTOR 0P 0V
D008	E31-2517-05	LEAD WIRE WITH CONNECTOR
D009	E31-2517-05	LEAD WIRE WITH CONNECTOR
D010	E31-2518-05	LEAD WIRE WITH CONNECTOR
D011	TNR15G431K	VARISTOR
P001	E31-2781-05	LEAD WIRE WITH CONNECTOR
P002	E31-2781-05	LEAD WIRE WITH CONNECTOR
P005	E31-2514-05	LEAD WIRE WITH CONNCTOR
P009	E31-2514-05	LEAD WIRE WITH CONNCTOR
P010	E31-2517-05	LEAD WIRE WITH CONNECTOR
P011	E31-2517-05	LEAD WIRE WITH CONNECTOR
P012	E31-2518-05	LEAD WIRE WITH CONNECTOR
P201	E31-2519-05	LEAD WIRE A'SSY IC, TRANSFORMER
P201	E31-2519-05	LEAD WIRE A'SSY IC, TRANSFORMER
P202	NO USE	
P203	E31-2519-05	LEAD WIRE A'SSY IC, TRANSFORMER
P204	NO USE	
P205	E31-2782-05	LEAD WIRE WITH CONNECTOR
P309	E31-2751-05	LEAD WIRE WITH CONNECTOR
R014	R92-1187-05	RES. FIXED
R020	R92-1176-05	RES. FIXED
R051	RN14BK2E9103P	RES. METAL FILM 910K 1% 1/4W
R052	RN14BK2E9103P	RES. METAL FILM 910K 1% 1/4W
S001	S59-1502-05	SWITCH (CIRCUIT PROTECTOR)
T001	L01-9646-05	POWER TRANSFORMER
T002	L15-0411-05	INDUCTOR
U203	UPC7805H	IC, VOLTAGE REGULATOR
U204	UPC7805H	IC, VOLTAGE REGULATOR
VR001	R29-0505-05	V.R. 10K
VR002	R05-3511-05	V.R. 500 B

# PARTS LIST

## AMPLIFIER UNIT (PD110-3/5)

X73-1690-01

REF. NO	PARTS NO	NAME & DESCRIPTION
	E23-0047-04	TERMINAL
	F01-0846-05	HEAT SINK
	F01-0856-14	HEAT SINK
	J25-5159-12	PCB (UNMOUNTED)
	N09-0623-04	SCREW M 3X8
	212-1018-05	TUBE (PLASTIC)
	212-2010-05	TUBE (PLASTIC)
C001	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C002	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C003	C90-0924-05	CAP. ELECTRO 330 50V
C004	CE04W1E100M	CAP. ELECTRO 10 20% 25V
C005	CE04DW1E221M	CAP. ELECTRO 220 20% 25V
C006	C90-0939-05	CAP. ELECTRO 470 35V
C007	CE04W1E100M	CAP. ELECTRO 10 20% 25V
C008	CE04W1E100M	CAP. ELECTRO 10 20% 25V
C009	CE04DW1E221M	CAP. ELECTRO 220 20% 25V
C010	C90-0924-05	CAP. ELECTRO 330 50V
C011	CE04W1E101M	CAP. ELECTRO 100 20% 25V
C012	CE04W1HR33M	CAP. ELECTRO 0.33 20% 50V
C013	CE04W1H4R7M	CAP. ELECTRO 4.7 20% 50V
C014	CE04W1E100M	CAP. ELECTRO 10 20% 25V
C015	CE04AW1H010M	CAP. ELECTRO 1 20% 50V
C016	CC45CH1H101J	CAP. CERAMIC 100P 5% 50V
C017	CE04AW1H010M	CAP. ELECTRO 1 20% 50V
C018	CC45CH1H101J	CAP. CERAMIC 100P 5% 50V
C019	C90-0967-05	CAP. ELECTRO 0.39 160V
C020	C092P2A102J	CAP. MYLAR 1000P 5% 100V
C021	NO USE	
C022	C092P2A332J	CAP. MYLAR 3300P 5% 100V
C023	NO USE	
C024	CF92V1H332J	CAP. POLYESTER 3300P 5% 50V
C028	CC45CH1H101J	CAP. CERAMIC 100P 5% 50V
C029	NO USE	
C030	CC45CH1H101J	CAP. CERAMIC 100P 5% 50V
C031	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C032	CC45CH1H101J	CAP. CERAMIC 100P 5% 50V
C033	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C034	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C035	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C036	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C037	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C038	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C039	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C040	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C041	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C042	CC45CH1H101J	CAP. CERAMIC 100P 5% 50V
C043	CC45CH1H101J	CAP. CERAMIC 100P 5% 50V
C044	CF92V1H472J	CAP. POLYESTER 4700P 5% 50V
C045	CF92V1H472J	CAP. POLYESTER 4700P 5% 50V
C050	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C051	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C052	C90-0924-05	CAP. ELECTRO 330 50V
C053	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C054	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C055	CE04W1E100M	CAP. ELECTRO 10 20% 25V
C056	C90-0924-05	CAP. ELECTRO 330 50V
C057	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C058	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C059	CE04W1E100M	CAP. ELECTRO 10 20% 25V
C060	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C061	CC45CH1H470J	CAP. CERAMIC 47P 5% 50V
C062	C91-0595-05	CAP. POLYESTER 0.033 2% 50V
C063	CC45CH1H101J	CAP. CERAMIC 100P 5% 50V
C064	CF92V1H102J	CAP. POLYESTER 1000P 5% 50V
C065	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C066	CF92V1H472J	CAP. POLYESTER 4700P 5% 50V
C067	CE04W1E100M	CAP. ELECTRO 10 20% 25V
C068	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C069	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C073	CF92V1H224J	CAP. POLYESTER 0.22 5% 50V
C074	CC45CH1H101J	CAP. CERAMIC 100P 5% 50V
C075	CE04W1E100M	CAP. ELECTRO 10 20% 25V
C076	CE04W1C471M	CAP. ELECTRO 470 20% 16V
D001	S1VB20	DIODE
D002	S1VB20	DIODE
D003	DSA1A2	DIODE
D004	DSA1A2	DIODE

REF. NO	PARTS NO	NAME & DESCRIPTION		
R004	R92-1161-05	RES. CARBON	560	5% 1/4W
R005	RD14DB2H512J	RES. CARBON	5.1K	5% 1/2W
R006	RD14BB2C102J	RES. CARBON	1K	5% 1/6W
D009	RD13F(B2)	DIODE ZENER	13V	
D010	MTZ9.1JC	DIODE ZENER	9V	
D011	1SS132	DIODE		
D012	MTZ4.7JA	DIODE ZENER	4.5V	
D013	1SS132	DIODE		
D014	1SZ59(T)	DIODE ZENER	6.25V	
D015	1SZ59(T)	DIODE ZENER	6.25V	
D016	1SS132	DIODE		
D017	1SS132	DIODE		
D018	1SS132	DIODE		
D019	1SS132	DIODE		
D020	1SS132	DIODE		
D021	1SS132	DIODE		
D022	1SS132	DIODE		
D023	1SS132	DIODE		
D024	1SS132	DIODE		
D025	1SS132	DIODE		
D026	1SS132	DIODE		
D027	1SS132	DIODE		
D028	MTZ5.1JB	DIODE, ZENER	5V	
D029	1SS132	DIODE		
D030	MTZ5.1JB	DIODE, ZENER	5V	
D031	DSA1A2	DIODE		
D032	DSA1A2	DIODE		
D040	S1VB20	DIODE		
D041	S1VB20	DIODE		
D042	DSA1A2	DIODE		
D043	DSA1A2	DIODE		
D044	DSA1A2	DIODE		
D045	DSA1A2	DIODE		
D046	MTZ6.2JB	DIODE ZENER	6.1V	
D047	1SS132	DIODE		
D048	1SS132	DIODE		
D049	1SS132	DIODE		
D050	1SS132	DIODE		
D051	RD10F(B2)	DIODE ZENER	10V	
D052	RD10F(B2)	DIODE ZENER	10V	
D053	1SS132	DIODE		
D054	1SS132	DIODE		
D055	1SS132	DIODE		
D056	1SS132	DIODE		
D057	1SS132	DIODE		
D058	1SS132	DIODE		
D059	MTZ8.2JC	DIODE ZENER	9.6V	
D060	1SS132	DIODE		
D061	1SS132	DIODE		
D062	1SS132	DIODE		
D063	1SS132	DIODE		
D064	1SS132	DIODE		
D065	1SS132	DIODE		
P003	E40-0273-05	PIN CONNECTOR	2 P	
P004	E40-0273-05	PIN CONNECTOR	2 P	
P206	E40-0273-05	PIN CONNECTOR	2 P	
Q001	2SD1406(Y)	TR. SI, NPN		
Q002	2SC2785(F)	TR. SI, NPN		
Q003	2SC2785(F)	TR. SI, NPN		
Q004	2SA1021(O)	TR. SI, PNP		
Q005	2SB1015(Y)	TR. SI, PNP		
Q006	2SA1175(F)	TR. SI, PNP		
Q007	2SA1175(F)	TR. SI, PNP		
Q008	2SC2481(O)	TR. SI, NPN		
Q009	2SC3064(F)	TR. SI, NPN		
Q010	2SC2785(F)	TR. SI, NPN		
Q011	2SC2785(F)	TR. SI, NPN		
Q012	2SC2459(GR)	TR. SI, NPN		
Q013	2SC2481(O)	TR. SI, NPN		
Q014	2SK170(BL)	FET, N-CHANNEL		
Q015	2SK170(BL)	FET, N-CHANNEL		
Q016	2SK170(BL)	FET, N-CHANNEL		
Q017	2SK170(BL)	FET, N-CHANNEL		
Q020	2SK170(BL)	FET, N-CHANNEL		
Q021	2SC2785(F)	TR. SI, NPN		
Q022	2SC2481(O)	TR. SI, NPN		
R001	RD14BB2C101J	RES. CARBON	100	5% 1/6W
R002	RD14BB2C101J	RES. CARBON	100	5% 1/6W
R003	RD14DB3D471J	RES. CARBON	470	5% 2W

# PARTS LIST

REF. NO	PARTS NO	NAME & DESCRIPTION	REF. NO	PARTS NO	NAME & DESCRIPTION
D005	NO USE		R090	RD14BB2C333J	RES. CARBON 33K 5% 1/6W
D006	RD13F(B2)	DIODE ZENER 13V	R091	NO USE	
D007	MTZ9.1JC	DIODE ZENER 9V	R092	RD14BB2C153J	RES. CARBON 15K 5% 1/6W
D008	ISS132	DIODE	R093	RD14BB2C473J	RES. CARBON 47K 5% 1/6W
R007	RD14DB2H2R7J	RES. CARBON 2.7 5% 1/2W	R094	RD14BB2C473J	RES. CARBON 47K 5% 1/6W
R008	RD14BB2C153J	RES. CARBON 15K 5% 1/6W	R095	RD14BB2C471J	RES. CARBON 470 5% 1/6W
R009	R92-1144-05	RES. METAL FILM 7.5K 1% 1/5W			
R010	R92-1144-05	RES. METAL FILM 7.5K 1% 1/5W	R098	R92-1061-05	JUMPING RES. ZERO OHM
R011	RD14DB3D471J	RES. CARBON 470 5% 2W	R099	NO USE	
R012	R92-1161-05	RES. CARBON 560 5% 1/4W	R100	RD14BB2C101J	RES. CARBON 100 5% 1/6W
R013	RD14DB2H512J	RES. CARBON 5.1K 5% 1/2W	R101	RD14BB2C101J	RES. CARBON 100 5% 1/6W
R014	RD14BB2C102J	RES. CARBON 1K 5% 1/6W	R102	RD14DB2H392J	RES. CARBON 3.9K 5% 1/2W
R015	RD14DB2H2R7J	RES. CARBON 2.7 5% 1/2W	R103	RD14BB2C103J	RES. CARBON 10K 5% 1/6W
R016	RD14BB2C153J	RES. CARBON 15K 5% 1/6W	R104	RD14BB2C153J	RES. CARBON 15K 5% 1/6W
R017	RD14BB2C682J	RES. CARBON 6.8K 5% 1/6W	R105	RD14BB2C123J	RES. CARBON 12K 5% 1/6W
R018	R92-1138-05	RES. METAL FILM 360 1% 1/5W	R106	RD14BB2C332J	RES. CARBON 3.3K 5% 1/6W
R019	R92-1131-05	RES. METAL FILM 430 1% 1/5W	R107	RD14BB2C472J	RES. CARBON 4.7K 5% 1/6W
R020	R92-1139-05	RES. METAL FILM 3.09K 1% 1/5W	R108	R92-1152-05	RES. METAL FILM 470K 1% 1/5W
R021	R92-1140-05	RES. METAL FILM 4.3K 1% 1/5W	R109	RD14BB2C104J	RES. CARBON 100K 5% 1/6W
			R110	RD14BB2C222J	RES. CARBON 2.2K 5% 1/6W
R024	RD14BB2C153J	RES. CARBON 15K 5% 1/6W	R111	R92-1149-05	RES. METAL FILM 22K 1% 1/5W
R025	RD14BB2C153J	RES. CARBON 15K 5% 1/6W	R112	RD14BB2C682J	RES. CARBON 6.8K 5% 1/6W
R026	RD14BB2C243J	RES. CARBON 24K 5% 1/6W	R113	R92-1151-05	RES. METAL FILM 330K 1% 1/5W
R027	RD14BB2C121J	RES. CARBON 120 5% 1/6W	R114	RD14BB2C470J	RES. CARBON 47 5% 1/6W
R028	RD14BB2C182J	RES. CARBON 1.8K 5% 1/6W	R115	RD14BB2C104J	RES. CARBON 100K 5% 1/6W
R029	RD14BB2C181J	RES. CARBON 180 5% 1/6W	R116	RD14BB2C472J	RES. CARBON 4.7K 5% 1/6W
R030	RN14BE2E5101D	RES. METAL FILM 5.1K 0.5% 1/4W	R117	RD14BB2C224J	RES. CARBON 220K 5% 1/6W
R031	RD14BB2C102J	RES. CARBON 1K 5% 1/6W	R118	RD14BB2C103J	RES. CARBON 10K 5% 1/6W
R032	R92-1150-05	RES. METAL FILM 100K 1% 1/5W	R119	RD14BB2C122J	RES. CARBON 1.2K 5% 1/6W
R033	R92-1138-05	RES. METAL FILM 360 1% 1/5W	R120	RD14DB3D472J	RES. CARBON 4.7K 5% 2W
R034	RD14BB2C151J	RES. CARBON 150 5% 1/6W	R121	RD14BB2C104J	RES. CARBON 100K 5% 1/6W
R035	R92-1146-05	RES. METAL FILM 11K 1% 1/5W	R122	R92-1076-05	RES. METAL GLAZE 27M 5% 1/2W
R036	RN14BE2E5601D	RES. METAL FILM 5.6K 0.5% 1/4W	R123	RD14BB2C472J	RES. CARBON 4.7K 5% 1/6W
R037	RD14BB2C102J	RES. CARBON 1K 5% 1/6W	R124	RD14BB2C105J	RES. CARBON 1M 5% 1/6W
R038	R92-1150-05	RES. METAL FILM 100K 1% 1/5W			
R039	R92-1138-05	RES. METAL FILM 360 1% 1/5W	R127	RD14BB2C911J	RES. CARBON 910 5% 1/6W
R040	RD14BB2C221J	RES. CARBON 220 5% 1/6W	R128	R92-1133-05	RES. METAL FILM 5.6K 1% 1/5W
R041	R92-1147-05	RES. METAL FILM 16.2K 1% 1/5W	R129	RD14BB2C472J	RES. CARBON 4.7K 5% 1/6W
R042	RN14BE2H1002D	RES. METAL FILM 10K 0.5% 1/2W	R130	RD14BB2C103J	RES. CARBON 10K 5% 1/6W
R043	RN14BE2H3652D	RES. METAL FILM 36.5K 0.5% 1/2W	R131	R92-1149-05	RES. METAL FILM 22K 1% 1/5W
R044	RN14BE2H3652D	RES. METAL FILM 36.5K 0.5% 1/2W	R132	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R045	RN14BE2H1002D	RES. METAL FILM 10K 0.5% 1/2W	R133	RD14BB2C103J	RES. CARBON 10K 5% 1/6W
R046	RN14BE2H3740D	RES. METAL FILM 374 0.5% 1/2W	R134	RD14BB2C103J	RES. CARBON 10K 5% 1/6W
R047	RD14BB2C102J	RES. CARBON 1K 5% 1/6W	R135	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R048	RD14BB2C102J	RES. CARBON 1K 5% 1/6W	R136	RD14BB2C472J	RES. CARBON 4.7K 5% 1/6W
R049	R92-1134-05	RES. METAL FILM 1K 1% 1/5W	R137	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R050	RD14BB2C102J	RES. CARBON 1K 5% 1/6W	R138	NO USE	
R051	RD14BB2C102J	RES. CARBON 1K 5% 1/6W	R139	RD14DB3A330J	RES. CARBON 33 5% 1W
R052	R92-1134-05	RES. METAL FILM 1K 1% 1/5W	R140	NO USE	
R053	RD14BB2C162J	RES. CARBON 1.6K 5% 1/6W	R141	RD14DB2H102J	RES. CARBON 1K 5% 1/2W
R054	R92-1140-05	RES. METAL FILM 4.3K 1% 1/5W	R142	NO USE	
R055	R92-1131-05	RES. METAL FILM 430 1% 1/5W	R143	RN14BE2H3652D	RES. METAL FILM 36.5K 0.5% 1/2W
R056	RD14BB2C122J	RES. CARBON 1.2K 5% 1/6W	R144	RD14BB2C103J	RES. CARBON 10K 5% 1/6W
R057	RD14BB2C101J	RES. CARBON 100 5% 1/6W			
R058	RD14BB2C102J	RES. CARBON 1K 5% 1/6W	U001	NJM072D	FET INPUT OPERATION AMPLIFIER
R059	RD14BB2C102J	RES. CARBON 1K 5% 1/6W	U002	NJM7815A	IC, VOLTAGE REGULATOR
R060	RD14BB2C102J	RES. CARBON 1K 5% 1/6W	U003	NJM072D	FET INPUT OPERATION AMPLIFIER
R061	RD14BB2C102J	RES. CARBON 1K 5% 1/6W	U004	OP07DP	OPERATIONAL AMPLIFIER
R062	RD14BB2C122J	RES. CARBON 1.2K 5% 1/6W	U005	OP07DP	OPERATIONAL AMPLIFIER
R063	RD14BB2C473J	RES. CARBON 47K 5% 1/6W	U006	UPC4558C	OPERATIONAL AMPLIFIER
R064	R92-1145-05	RES. METAL FILM 10K 1% 1/5W	U007	NJM072D	FET INPUT OPERATION AMPLIFIER
R065	RD14DB3A101J	RES. CARBON 100 5% 1W			
R066	R92-1132-05	RES. METAL FILM 712 1% 1/5W	U010	NJM7815A	IC, VOLTAGE REGULATOR
R067	RD14BB2C104J	RES. CARBON 100K 5% 1/6W	U011	UPC7915HA	IC, VOLTAGE REGULATOR
R068	R92-1150-05	RES. METAL FILM 100K 1% 1/5W	U012	UPC4558C	OPERATIONAL AMPLIFIER
R069	R92-1141-05	RES. METAL FILM 4.7K 1% 1/5W	U013	NJM072D	FET INPUT OPERATION AMPLIFIER
R070	R92-1137-05	RES. METAL FILM 150 1% 1/5W	U014	HA17555PS	TIMER
R071	RD14BB2C471J	RES. CARBON 470 5% 1/6W	U015	TLP521-1(A)	PHOTO COUPLER
R072	R92-1143-05	RES. METAL FILM 6.8K 1% 1/5W			
R073	R92-1148-05	RES. METAL FILM 18K 1% 1/5W	VR001	R12-1532-05	RES. SEMI FIXED 2K B
R074	RD14BB2C104J	RES. CARBON 100K 5% 1/6W	VR002	R12-4511-05	RES. SEMI FIXED 50K B
R075	RD14BB2C104J	RES. CARBON 100K 5% 1/6W	VR003	R12-2518-05	RES. SEMI FIXED 5K B
R076	R92-1150-05	RES. METAL FILM 100K 1% 1/5W	VR004	R12-4511-05	RES. SEMI FIXED 50K B
R077	R92-1141-05	RES. METAL FILM 4.7K 1% 1/5W	VR005	R12-3522-05	RES. SEMI FIXED 10K B
R078	R92-1137-05	RES. METAL FILM 150 1% 1/5W	VR006	R12-3523-05	RES. SEMI FIXED 20K B
R079	RD14BB2C471J	RES. CARBON 470 5% 1/6W	VR007	R12-2513-05	RES. SEMI FIXED 5K B
R080	R92-1143-05	RES. METAL FILM 6.8K 1% 1/5W	VR008	R12-4508-05	RES. SEMI FIXED 50K B
R081	R92-1148-05	RES. METAL FILM 18K 1% 1/5W	VR009	R12-2513-05	RES. SEMI FIXED 5K B
R082	R92-1142-05	RES. METAL FILM 5.1K 1% 1/5W	VR010	R12-4508-05	RES. SEMI FIXED 50K B
R083	RD14BB2C104J	RES. CARBON 100K 5% 1/6W	VR011	R12-4508-05	RES. SEMI FIXED 50K B
R084	R92-1150-05	RES. METAL FILM 100K 1% 1/5W			
R085	R92-1136-05	RES. METAL FILM 82 1% 1/5W	VR020	R12-3522-05	RES. SEMI FIXED 10K B
R086	RD14BB2C101J	RES. CARBON 100 5% 1/6W			
R087	R92-1142-05	RES. METAL FILM 5.1K 1% 1/5W			
R088	R92-1145-05	RES. METAL FILM 10K 1% 1/5W			
R089	RD14BB2C333J	RES. CARBON 33K 5% 1/6W			

# PARTS LIST

## AMPLIFIER UNIT (PD110-3D/5D)

### X73-1700-01

REF.NO	PARTS NO	NAME & DESCRIPTION
	E23-0047-04	TERMINAL
	F01-0846-05	HEAT SINK
	F01-0856-14	HEAT SINK
	J25-5159-12	PCB (UNMOUNTED)
	N09-0623-04	SCREW M 3X8
	212-1018-05	TUBE (PLASTIC)
	212-2010-05	TUBE (PLASTIC)
C001	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C002	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C003	C90-0924-05	CAP. ELECTRO 330 20% 25V
C004	CE04W1E100M	CAP. ELECTRO 10 20% 25V
C005	CE04DW1E221M	CAP. ELECTRO 220 20% 25V
C006	C90-0939-05	CAP. ELECTRO 470 35V
C007	CE04W1E100M	CAP. ELECTRO 10 20% 25V
C008	CE04W1E100M	CAP. ELECTRO 10 20% 25V
C009	CE04DW1E221M	CAP. ELECTRO 220 20% 25V
C010	C90-0924-05	CAP. ELECTRO 330 50V
C011	CE04W1E101M	CAP. ELECTRO 100 20% 25V
C012	CE04W1HR33M	CAP. ELECTRO 0.33 20% 50V
C013	CE04W1H4R7M	CAP. ELECTRO 4.7 20% 50V
C014	CE04W1E100M	CAP. ELECTRO 10 20% 25V
C015	CE04AW1H010M	CAP. ELECTRO 1 20% 50V
C016	CC45CH1H101J	CAP. CERAMIC 100P 5% 50V
C017	CE04AW1H010M	CAP. ELECTRO 1 20% 50V
C018	CC45CH1H101J	CAP. CERAMIC 100P 5% 50V
C019	C90-0967-05	CAP. ELECTRO 0.39 160V
C020	CQ92P2A102J	CAP. MYLAR 1000P 5% 100V
C021	NO USE	
C022	CQ92P2A332J	CAP. MYLAR 3300P 5% 100V
C023	NO USE	
C024	CF92V1H332J	CAP. POLYESTER 3300P 5% 50V
C028	CC45CH1H101J	CAP. CERAMIC 100P 5% 50V
C029	NO USE	
C030	CC45CH1H101J	CAP. CERAMIC 100P 5% 50V
C031	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C032	CC45CH1H101J	CAP. CERAMIC 100P 5% 50V
C033	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C034	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C035	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C036	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C037	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C038	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C039	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C040	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C041	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C042	CC45CH1H101J	CAP. CERAMIC 100P 5% 50V
C043	CC45CH1H101J	CAP. CERAMIC 100P 5% 50V
C044	CF92V1H472J	CAP. POLYESTER 4700P 5% 50V
C045	CF92V1H472J	CAP. POLYESTER 4700P 5% 50V
C050	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C051	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C052	C90-0924-05	CAP. ELECTRO 330 50V
C053	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C054	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C055	CE04W1E100M	CAP. ELECTRO 10 20% 25V
C056	C90-0924-05	CAP. ELECTRO 330 50V
C057	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C058	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C059	CE04W1E100M	CAP. ELECTRO 10 20% 25V
C060	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C061	CC45CH1H470J	CAP. CERAMIC 47P 5% 50V
C062	C91-0595-05	CAP. POLYESTER 0.033 2% 50V
C063	CC45CH1H101J	CAP. CERAMIC 100P 5% 50V
C064	CF92V1H102J	CAP. POLYESTER 1000P 5% 50V
C065	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C066	CF92V1H472J	CAP. POLYESTER 4700P 5% 50V
C067	CE04W1E100M	CAP. ELECTRO 10 20% 25V
C068	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C069	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C070	CE04W1E100M	CAP. ELECTRO 10 20% 25V
C071	CE04W1E100M	CAP. ELECTRO 10 20% 25V
C072	NO USE	
C073	CF92V1H224J	CAP. POLYESTER 0.22 5% 50V
C074	CC45CH1H101J	CAP. CERAMIC 100P 5% 50V
C075	CE04W1E100M	CAP. ELECTRO 10 20% 25V
C076	CE04W1C471M	CAP. ELECTRO 470 20% 16V
C201	CE04W1E471M	CAP. ELECTRO 470 20% 25V

REF.NO	PARTS NO	NAME & DESCRIPTION
C202	CE04W1E470M	CAP. ELECTRO 47 20% 25V
C203	CE04W1E471M	CAP. ELECTRO 470 20% 25V
C204	CE04W1E470M	CAP. ELECTRO 47 20% 25V
C205	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C206	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C207	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C208	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C209	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C210	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C211	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C212	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
D001	S1VB20	DIODE
D002	S1VB20	DIODE
D003	DSA1A2	DIODE
D004	DSA1A2	DIODE
D005	NO USE	
D006	RD13F(B2)	DIODE ZENER 13V
D007	MTZ9.1JC	DIODE ZENER 9V
D008	1SS132	DIODE
D009	RD13F(B2)	DIODE ZENER 13V
D010	MTZ9.1JC	DIODE ZENER 9V
D011	1SS132	DIODE
D012	MTZ4.7JA	DIODE ZENER 4.5V
D013	1SS132	DIODE
D014	1SZ59(T)	DIODE ZENER 6.25V
D015	1SZ59(T)	DIODE ZENER 6.25V
D016	1SS132	DIODE
D017	1SS132	DIODE
D018	1SS132	DIODE
D019	1SS132	DIODE
D020	1SS132	DIODE
D021	1SS132	DIODE
D022	1SS132	DIODE
D023	1SS132	DIODE
D024	1SS132	DIODE
D025	1SS132	DIODE
D026	1SS132	DIODE
D027	1SS132	DIODE
D028	MTZ5.1JB	DIODE, ZENER 5V
D029	1SS132	DIODE
D030	MTZ5.1JB	DIODE, ZENER 5V
D031	DSA1A2	DIODE
D032	DSA1A2	DIODE
D040	S1VB20	DIODE
D041	S1VB20	DIODE
D042	DSA1A2	DIODE
D043	DSA1A2	DIODE
D044	DSA1A2	DIODE
D045	DSA1A2	DIODE
D046	MTZ6.2JB	DIODE ZENER 6.1V
D047	1SS132	DIODE
D048	1SS132	DIODE
D049	1SS132	DIODE
D050	1SS132	DIODE
D051	RD10F(B2)	DIODE ZENER 10V
D052	RD10F(B2)	DIODE ZENER 10V
D053	1SS132	DIODE
D054	1SS132	DIODE
D055	1SS132	DIODE
D056	1SS132	DIODE
D057	1SS132	DIODE
D058	1SS132	DIODE
D059	MTZ8.2JC	DIODE ZENER 9.6V
D060	1SS132	DIODE
D061	1SS132	DIODE
D062	1SS132	DIODE
D063	1SS132	DIODE
D064	1SS132	DIODE
D065	1SS132	DIODE
D201	S1VB20	DIODE
D202	S1VB20	DIODE
P003	E40-0273-05	PIN CONNECTOR 2 P
P004	E40-0273-05	PIN CONNECTOR 2 P
P201	E40-0673-05	PIN CONNECTOR 6 P
P202	E40-0373-05	PIN CONNECTOR 3 P
P203	E40-0373-05	PIN CONNECTOR 3 P
P204	E40-0673-05	PIN CONNECTOR 6 P
P205	E40-0273-05	PIN CONNECTOR 2 P
P206	E40-0273-05	PIN CONNECTOR 2 P

# PARTS LIST

REF.NO	PARTS NO	NAME & DESCRIPTION
Q001	2SD1406(Y)	TR. SI, NPN
Q002	2SC2785(F)	TR. SI, NPN
Q003	2SC2785(F)	TR. SI, NPN
Q004	2SA1021(O)	TR. SI, PNP
Q005	2SB1015(Y)	TR. SI, PNP
Q006	2SA1175(F)	TR. SI, PNP
Q007	2SA1175(F)	TR. SI, PNP
Q008	2SC2481(O)	TR. SI, NPN
Q009	2SC3064(F)	TR. SI, NPN
Q010	2SC2785(F)	TR. SI, NPN
Q011	2SC2785(F)	TR. SI, NPN
Q012	2SC2459(GR)	TR. SI, NPN
Q013	2SC2481(O)	TR. SI, NPN
Q016	2SK170(BL)	FET, N-CHANNEL
Q017	2SK170(BL)	FET, N-CHANNEL
Q020	2SK170(BL)	FET, N-CHANNEL
Q021	2SC2785(F)	TR. SI, NPN
Q022	2SC2481(O)	TR. SI, NPN
R001	RD14BB2C101J	RES. CARBON 100 5% 1/6W
R002	RD14BB2C101J	RES. CARBON 100 5% 1/6W
R003	RD14DB3D471J	RES. CARBON 470 5% 2W
R004	R92-1161-05	RES. CARBON 560 5% 1/4W
R005	RD14DB2H512J	RES. CARBON 5.1K 5% 1/2W
R006	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R007	RD14DB2H2R7J	RES. CARBON 2.7 5% 1/2W
R008	RD14BB2C153J	RES. CARBON 15K 5% 1/6W
R009	R92-1144-05	RES. METAL FILM 7.5K 1% 1/5W
R010	R92-1144-05	RES. METAL FILM 7.5K 1% 1/5W
R011	RD14DB3D471J	RES. CARBON 470 5% 2W
R012	R92-1161-05	RES. CARBON 560 5% 1/4W
R013	RD14DB2H512J	RES. CARBON 5.1K 5% 1/2W
R014	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R015	RD14DB2H2R7J	RES. CARBON 2.7 5% 1/2W
R016	RD14BB2C153J	RES. CARBON 15K 5% 1/6W
R017	RD14BB2C682J	RES. CARBON 6.8K 5% 1/6W
R018	R92-1138-05	RES. METAL FILM 360 1% 1/5W
R019	R92-1131-05	RES. METAL FILM 430 1% 1/5W
R020	R92-1139-05	RES. METAL FILM 3.09K 1% 1/5W
R021	R92-1140-05	RES. METAL FILM 4.3K 1% 1/5W
R024	RD14BB2C153J	RES. CARBON 15K 5% 1/6W
R025	RD14BB2C153J	RES. CARBON 15K 5% 1/6W
R026	RD14BB2C243J	RES. CARBON 24K 5% 1/6W
R027	RD14BB2C121J	RES. CARBON 120 5% 1/6W
R028	RD14BB2C182J	RES. CARBON 1.8K 5% 1/6W
R029	RD14BB2C181J	RES. CARBON 180 5% 1/6W
R030	RD14BB2E5101D	RES. METAL FILM 5.1K 0.5% 1/4W
R031	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R032	R92-1150-05	RES. METAL FILM 100K 1% 1/5W
R033	R92-1138-05	RES. METAL FILM 360 1% 1/5W
R034	RD14BB2C151J	RES. CARBON 150 5% 1/6W
R035	R92-1146-05	RES. METAL FILM 11K 1% 1/5W
R036	RD14BB2E5601D	RES. METAL FILM 5.6K 0.5% 1/4W
R037	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R038	R92-1150-05	RES. METAL FILM 100K 1% 1/5W
R039	R92-1138-05	RES. METAL FILM 360 1% 1/5W
R040	RD14BB2C221J	RES. CARBON 220 5% 1/6W
R041	R92-1147-05	RES. METAL FILM 16.2K 1% 1/5W
R042	RD14BE2H1002D	RES. METAL FILM 10K 0.5% 1/2W
R043	RD14BE2H3652D	RES. METAL FILM 36.5K 0.5% 1/2W
R044	RD14BE2H3652D	RES. METAL FILM 36.5K 0.5% 1/2W
R045	RD14BE2H1002D	RES. METAL FILM 10K 0.5% 1/2W
R046	RD14BE2H3740D	RES. METAL FILM 374 0.5% 1/2W
R047	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R048	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R049	R92-1134-05	RES. METAL FILM 1K 1% 1/5W
R050	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R051	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R052	R92-1134-05	RES. METAL FILM 1K 1% 1/5W
R053	RD14BB2C162J	RES. CARBON 1.6K 5% 1/6W
R054	R92-1140-05	RES. METAL FILM 4.3K 1% 1/5W
R055	R92-1131-05	RES. METAL FILM 430 1% 1/5W
R056	RD14BB2C122J	RES. CARBON 1.2K 5% 1/6W
R057	RD14BB2C101J	RES. CARBON 100 5% 1/6W
R058	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R059	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R060	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R061	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R062	RD14BB2C122J	RES. CARBON 1.2K 5% 1/6W
R063	RD14BB2C473J	RES. CARBON 47K 5% 1/6W
R064	R92-1145-05	RES. METAL FILM 10K 1% 1/5W

REF.NO	PARTS NO	NAME & DESCRIPTION
R065	RD14BB3A101J	RES. CARBON 100 5% 1W
R066	R92-1132-05	RES. METAL FILM 712 1% 1/5W
R067	RD14BB2C104J	RES. CARBON 100K 5% 1/6W
R068	R92-1150-05	RES. METAL FILM 100K 1% 1/5W
R069	R92-1141-05	RES. METAL FILM 4.7K 1% 1/5W
R070	R92-1137-05	RES. METAL FILM 150 1% 1/5W
R071	RD14BB2C471J	RES. CARBON 470 5% 1/6W
R072	R92-1143-05	RES. METAL FILM 6.8K 1% 1/5W
R073	R92-1061-05	JUMPING RES. ZERO OHM
R074	RD14BB2C104J	RES. CARBON 100K 5% 1/6W
R075	RD14BB2C104J	RES. CARBON 100K 5% 1/6W
R076	R92-1150-05	RES. METAL FILM 100K 1% 1/5W
R077	R92-1141-05	RES. METAL FILM 4.7K 1% 1/5W
R078	R92-1137-05	RES. METAL FILM 150 1% 1/5W
R079	RD14BB2C471J	RES. CARBON 470 5% 1/6W
R080	R92-1177-05	RES. FIXED
R081	R92-1061-05	JUMPING RES. ZERO OHM
R082	R92-1142-05	RES. METAL FILM 5.1K 1% 1/5W
R083	RD14BB2C104J	RES. CARBON 100K 5% 1/6W
R084	R92-1150-05	RES. METAL FILM 100K 1% 1/5W
R085	R92-1136-05	RES. METAL FILM 82 1% 1/5W
R086	RD14BB2C101J	RES. CARBON 100 5% 1/6W
R087	R92-1142-05	RES. METAL FILM 5.1K 1% 1/5W
R088	R92-1145-05	RES. METAL FILM 10K 1% 1/5W
R089	RD14BB2C333J	RES. CARBON 33K 5% 1/6W
R090	RD14BB2C333J	RES. CARBON 33K 5% 1/6W
R091	NO USE	
R092	RD14BB2C153J	RES. CARBON 15K 5% 1/6W
R093	RD14BB2C473J	RES. CARBON 47K 5% 1/6W
R094	RD14BB2C473J	RES. CARBON 47K 5% 1/6W
R095	RD14BB2C471J	RES. CARBON 470 5% 1/6W
R100	RD14BB2C101J	RES. CARBON 100 5% 1/6W
R101	RD14BB2C101J	RES. CARBON 100 5% 1/6W
R102	RD14DB2H392J	RES. CARBON 3.9K 5% 1/2W
R103	RD14BB2C103J	RES. CARBON 10K 5% 1/6W
R104	RD14BB2C153J	RES. CARBON 15K 5% 1/6W
R105	RD14BB2C123J	RES. CARBON 12K 5% 1/6W
R106	RD14BB2C332J	RES. CARBON 3.3K 5% 1/6W
R107	RD14BB2C472J	RES. CARBON 4.7K 5% 1/6W
R108	R92-1152-05	RES. METAL FILM 470K 1% 1/5W
R109	RD14BB2C104J	RES. CARBON 100K 5% 1/6W
R110	RD14BB2C222J	RES. CARBON 2.2K 5% 1/6W
R111	R92-1149-05	RES. METAL FILM 22K 1% 1/5W
R112	RD14BB2C682J	RES. CARBON 6.8K 5% 1/6W
R113	R92-1151-05	RES. METAL FILM 330K 1% 1/5W
R114	RD14BB2C470J	RES. CARBON 47 5% 1/6W
R115	RD14BB2C104J	RES. CARBON 100K 5% 1/6W
R116	RD14BB2C472J	RES. CARBON 4.7K 5% 1/6W
R117	RD14BB2C224J	RES. CARBON 220K 5% 1/6W
R118	RD14BB2C103J	RES. CARBON 10K 5% 1/6W
R119	RD14BB2C122J	RES. CARBON 1.2K 5% 1/6W
R120	RD14DB3D472J	RES. CARBON 4.7K 5% 2W
R121	RD14BB2C104J	RES. CARBON 100K 5% 1/6W
R122	R92-1076-05	RES. METAL GLAZE 27M 5% 1/2W
R123	RD14BB2C472J	RES. CARBON 4.7K 5% 1/6W
R124	RD14BB2C105J	RES. CARBON 1M 5% 1/6W
R127	RD14BB2C911J	RES. CARBON 910 5% 1/6W
R128	R92-1133-05	RES. METAL FILM 5.6K 1% 1/5W
R129	RD14BB2C472J	RES. CARBON 4.7K 5% 1/6W
R130	RD14BB2C103J	RES. CARBON 10K 5% 1/6W
R131	R92-1149-05	RES. METAL FILM 22K 1% 1/5W
R132	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R133	RD14BB2C103J	RES. CARBON 10K 5% 1/6W
R134	RD14BB2C103J	RES. CARBON 10K 5% 1/6W
R135	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R136	RD14BB2C472J	RES. CARBON 4.7K 5% 1/6W
R137	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R138	NO USE	
R139	RD14BB3A330J	RES. CARBON 33 5% 1W
R140	NO USE	
R141	RD14DB2H102J	RES. CARBON 1K 5% 1/2W
R142	NO USE	
R143	RD14BE2H3652D	RES. METAL FILM 36.5K 0.5% 1/2W
R144	RD14BB2C103J	RES. CARBON 10K 5% 1/6W
U001	NJM072D	FET INPUT OPERATION AMPLIFIER
U002	NJM7815A	IC, VOLTAGE REGULATOR
U003	NJM072D	FET INPUT OPERATION AMPLIFIER
U004	OP07DP	OPERATIONAL AMPLIFIER
U005	OP07DP	OPERATIONAL AMPLIFIER
U006	UPC4558C	OPERATIONAL AMPLIFIER
U007	NJM072D	FET INPUT OPERATION AMPLIFIER



# PARTS LIST

REF.NO	PARTS NO	NAME & DESCRIPTION
U010	NJM7815A	IC, VOLTAGE REGULATOR
U011	UPC7915HA	IC, VOLTAGE REGULATOR
U012	UPC4558C	OPERATIONAL AMPRIPIER
U013	NJM072D	FET INPUT OPERATION AMPLIFIER
U014	HA17555PS	TIMER
U015	TLP521-1(A)	PHOTO COUPLER
U201	LM79L05ACZ	REGULATOR
U202	LM79L05ACZ	REGULATOR
VR001	R12-1532-05	RES. SEMI FIXED 2K B
VR002	R12-4511-05	RES. SEMI FIXED 50K B
VR003	R12-2518-05	RES. SEMI FIXED 5K B
VR004	R12-4511-05	RES. SEMI FIXED 50K B
VR005	R12-3533-05	RES. SEMI FIXED 10K
VR006	R12-3534-05	RES. SEMI FIXED 20K
VR007	R12-1531-05	RES. SEMI FIXED 3K B
VR008	R12-4511-05	RES. SEMI FIXED 50K B
VR009	R12-1531-05	RES. SEMI FIXED 3K B
VR010	R12-4511-05	RES. SEMI FIXED 50K B
VR011	R12-4511-05	RES. SEMI FIXED 50K B
VR020	R12-3522-05	RES. SEMI FIXED 10K B

## DIGITAL PANEL METER UNIT (PD110-5D)

### X76-1260-09

REF.NO	PARTS NO	NAME & DESCRIPTION
	B33-4072-00	WIRE ASSY
	J25-5119-02	PCB (UNMOUNTED)
C001	CE04CW1A470M	CAP. ELECTRO 47 20% 10V
C002	CE04CW1A100M	CAP. ELECTRO 10 20% 10V
C003	C91-1204-05	CAP. CERAMIC 0.22 5% 150V
C004	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C005	CF92V1H104J	CAP. POLYESTER 0.1 5% 50V
C006	CM93BD2A101J	CAP. MICA 100P 5% 100V
C007	CF92V1H223J	CAP. POLYESTER 0.022 5% 50V
C008	C91-1205-05	CAP. CERAMIC 0.1 50V
C009	NO USE	
C010	CE04CW1V2R2M	CAP. ELECTRO 2.2 20% 35V
C011	C91-0591-05	CAP. CERAMIC 0.22 50V
C031	CE04CW1A470M	CAP. ELECTRO 47 20% 10V
C032	CE04CW1A100M	CAP. ELECTRO 10 20% 10V
C033	C91-1204-05	CAP. CERAMIC 0.22 150V
C034	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
C035	CF92V1H104J	CAP. POLYESTER 0.1 5% 50V
C036	CM93BD2A101J	CAP. MICA 100P 5% 100V
C037	CF92V1H223J	CAP. POLYESTER 0.022 5% 50V
D001	GL9D03D	DIODE
D002	GL9D03D	DIODE
D003	GL9D03D	DIODE
D004	GL9D03D	DIODE
D005	LT9002D	LED
D006	1SS132	DIODE
D007	1S1544A	DIODE
D008	1S1544A	DIODE
D009	1SS132	DIODE
D032	GL9D03D	DIODE
D033	GL9D03D	DIODE
D034	GL9D03D	DIODE
D035	LT9002D	LED
P003	E31-2513-15	LEAD WIRE WITH CONNECTOR
P004	E31-2512-15	LEAD WIRE WITH CONNECTOR
P204	E31-2520-15	LEAD WIRE WITH CONNECTOR
Q001	DTC144EF	TR. SI, NPN
Q002	DTC144EF	TR. SI, NPN
Q003	DTA124EF	TR. SI, PNP
Q004	2SK117(GR)	FET, N-CHANNEL
R001	RN14BK2C4703F	RES. METAL FILM 470K 1% 1/6W
R002	RN14BK2C1103F	RES. METAL FILM 110K 1% 1/6W
R003	RD14BB2C182J	RES. CARBON 1.8K 5% 1/6W
R004	RN14BE2E1502F	RES. METAL FILM 15K 1% 1/4W
R005	RN14BE2E1002F	RES. METAL FILM 10K 1% 1/4W
R006	RD14BB2C161J	RES. CARBON 160 5% 1/6W
R009	RD14BB2C123J	RES. CARBON 12K 5% 1/6W
R010	RD14BB2C333J	RES. CARBON 33K 5% 1/6W
R011	RD14BB2C104J	RES. CARBON 100K 5% 1/6W
R012	RD14BB2C104J	RES. CARBON 100K 5% 1/6W
R013	RD14BB2C103J	RES. CARBON 10K 5% 1/6W
R014	R92-1061-05	JUMPING RES. ZERO OHM
R015	RD14BB2C301J	RES. CARBON 300 5% 1/6W
R016	RD14BB2C301J	RES. CARBON 300 5% 1/6W
R017	RD14BB2C103J	RES. CARBON 10K 5% 1/6W
R018	RD14BB2C104J	RES. CARBON 100K 5% 1/6W
R019	RN14BC2E1001F	RES. METAL FILM 1K 1% 1/4W
R020	NO USE	
R021	RN14BK2C2001F	RES. METAL FILM 2K 1% 1/6W
R022	RN14BK2C1501F	RES. METAL FILM 1.5K 1% 1/6W
R023	RN14BK2C1301F	RES. METAL FILM 1.3K 1% 1/6W
R024	RN14BK2C2201F	RES. METAL FILM 2.2K 1% 1/6W
R025	RN14BC2E1002F	RES. METAL FILM 10K 1% 1/4W
R026	RD14BB2C161J	RES. CARBON 160 5% 1/6W
R027	RD14BB2C364J	RES. CARBON 360K 5% 1/6W
R028	R92-1146-05	RES. METAL FILM 11K 1% 1/5W
R029	R92-1143-05	RES. METAL FILM 6.8K 1% 1/5W
R030	NO USE	
R031	RN14BK2C4703F	RES. METAL FILM 470K 1% 1/6W
R032	RN14BK2C1103F	RES. METAL FILM 110K 1% 1/6W
R033	RD14BB2C182J	RES. CARBON 1.8K 5% 1/6W
R034	RN14BE2E1502F	RES. METAL FILM 15K 1% 1/4W

# PARTS LIST

REF.NO	PARTS NO	NAME & DESCRIPTION			
R035	RN14BB2E1002F	RES. METAL FILM 10K	1%	1/4W	
R036	RD14BB2C161J	RES. CARBON 160	5%	1/6W	
R037	RD14BB2C391J	RES. CARBON 390	5%	1/6W	
R048	RD14BB2C104J	RES. CARBON 100K	5%	1/6W	
R049	NO USE				
R050	RN14BC2E2671F	RES. METAL FILM 2.67K	1%	1/4W	
R055	RN14BC2E1802F	RES. METAL FILM 18K	1%	1/4W	
R056	RD14BB2C161J	RES. CARBON 160	5%	1/6W	
U001	TSC7107CPL-A	OPERATIONAL AMPLIFIER			
U002	LM336Z2.5	2.5V REFERENCE DIODE			
U003	LM339N	QUAD COMPARATOR			
U004	MC14011BCP	QUAD 2-INPUT NAND GATE			
U031	TSC7107CPL-A	OPERATIONAL AMPLIFIER			
U032	LM336Z2.5	2.5V REFERENCE DIODE			
VR001	R12-3518-05	RES. SEMI FIXED 10K B			
VR002	R12-0568-05	RES. SEMI FIXED 500			
VR003	R12-0556-05	RES. SEMI FIXED 100 B			
VR031	R12-3518-05	RES. SEMI FIXED 10K B			
VR032	R12-0568-05	RES. SEMI FIXED 500			

## DIGITAL PANEL METER UNIT (PD110-3D)

X76-1260-11

REF.NO	PARTS NO	NAME & DESCRIPTION			
	E33-4072-00	WIRE ASSY			
	J25-5119-02	PCB (UNMOUNTED)			
C001	CE04CW1A470M	CAP. ELECTRO 47	20%	10V	
C002	CE04CW1A100M	CAP. ELECTRO 10	20%	10V	
C003	C91-1204-05	CAP. CERAMIC 0.22		150V	
C004	CF92V1H473J	CAP. POLYESTER 0.047	5%	50V	
C005	CF92V1H104J	CAP. POLYESTER 0.1	5%	50V	
C006	CM93BD2A101J	CAP. MICA 100P	5%	100V	
C007	CF92V1H223J	CAP. POLYESTER 0.022	5%	50V	
C008	C91-1205-05	CAP. CERAMIC 0.1		50V	
C009	NO USE				
C010	CE04CW1V2R2M	CAP. ELECTRO 2.2	20%	35V	
C011	C91-0591-05	CAP. CERAMIC 0.22		50V	
C031	CE04CW1A470M	CAP. ELECTRO 47	20%	10V	
C032	CE04CW1A100M	CAP. ELECTRO 10	20%	10V	
C033	C91-1204-05	CAP. CERAMIC 0.22		150V	
C034	CF92V1H473J	CAP. POLYESTER 0.047	5%	50V	
C035	CF92V1H104J	CAP. POLYESTER 0.1	5%	50V	
C036	CM93BD2A101J	CAP. MICA 100P	5%	100V	
C037	CF92V1H223J	CAP. POLYESTER 0.022	5%	50V	
D001	GL9D03D	DIODE			
D002	GL9D03D	DIODE			
D003	GL9D03D	DIODE			
D004	GL9D03D	DIODE			
D005	LT9002D	LED			
D006	1SS132	DIODE			
D007	1S1544A	DIODE			
D008	1S1544A	DIODE			
D009	1SS132	DIODE			
D032	GL9D03D	DIODE			
D033	GL9D03D	DIODE			
D034	GL9D03D	DIODE			
D035	LT9002D	LED			
P003	E31-2513-15	LEAD WIRE WITH CONNECTOR			
P004	E31-2512-15	LEAD WIRE WITH CONNECTOR			
P204	E31-2520-15	LEAD WIRE WITH CONNECTOR			
Q001	DTC144EF	TR. SI, NPN			
Q002	DTC144EF	TR. SI, NPN			
Q003	DTA124EF	TR. SI, PNP			
Q004	2SK117(GR)	PBT. N-CHANNEL			
R001	RN14BK2C4703F	RES. METAL FILM 470K	1%	1/6W	
R002	RN14BK2C1103F	RES. METAL FILM 110K	1%	1/6W	
R003	RD14BB2C182J	RES. CARBON 1.8K	5%	1/6W	
R004	RN14BE2E1502F	RES. METAL FILM 15K	1%	1/4W	
R005	RN14BE2E1002F	RES. METAL FILM 10K	1%	1/4W	
R006	RD14BB2C161J	RES. CARBON 160	5%	1/6W	
R009	RD14BB2C123J	RES. CARBON 12K	5%	1/6W	
R010	RD14BB2C333J	RES. CARBON 33K	5%	1/6W	
R011	RD14BB2C104J	RES. CARBON 100K	5%	1/6W	
R012	RD14BB2C104J	RES. CARBON 100K	5%	1/6W	
R013	RD14BB2C103J	RES. CARBON 10K	5%	1/6W	
R014	R92-1061-05	JUMPING RES. ZERO	0HM		
R015	RD14BB2C301J	RES. CARBON 300	5%	1/6W	
R016	RD14BB2C301J	RES. CARBON 300	5%	1/6W	
R017	RD14BB2C103J	RES. CARBON 10K	5%	1/6W	
R018	RD14BB2C104J	RES. CARBON 100K	5%	1/6W	
R019	RN14BC2E1001F	RES. METAL FILM 1K	1%	1/4W	
R020	NO USE				
R021	RN14BK2C2001F	RES. METAL FILM 2K	1%	1/6W	
R022	RN14BK2C1501F	RES. METAL FILM 1.5K	1%	1/6W	
R023	RN14BK2C1301F	RES. METAL FILM 1.3K	1%	1/6W	
R024	RN14BK2C2201F	RES. METAL FILM 2.2K	1%	1/6W	
R025	RN14BC2E1002F	RES. METAL FILM 10K	1%	1/4W	
R026	RD14BB2C161J	RES. CARBON 160	5%	1/6W	
R027	RD14BB2C364J	RES. CARBON 360K	5%	1/6W	
R028	R92-1146-05	RES. METAL FILM 11K	1%	1/5W	
R029	R92-1143-05	RES. METAL FILM 6.8K	1%	1/5W	
R030	NO USE				
R031	RN14BK2C4703F	RES. METAL FILM 470K	1%	1/6W	
R032	RN14BK2C1103F	RES. METAL FILM 110K	1%	1/6W	
R033	RD14BB2C182J	RES. CARBON 1.8K	5%	1/6W	
R034	RN14BE2E1502F	RES. METAL FILM 15K	1%	1/4W	
R035	RN14BE2E1002F	RES. METAL FILM 10K	1%	1/4W	

# PARTS LIST

REF.NO	PARTS NO	NAME & DESCRIPTION
R036	RD14BB2C161J	RES. CARBON 160 5% 1/6W
R037	RD14BB2C391J	RES. CARBON 390 5% 1/6W
R048	RD14BB2C104J	RES. CARBON 100K 5% 1/6W
R049	NO USE	
R050	RN14BC2E1501F	RES. METAL FILM 1.5K 1% 1/4W
R055	RN14BC2E1802F	RES. METAL FILM 18K 1% 1/4W
R056	RD14BB2C161J	RES. CARBON 160 5% 1/6W
U001	TSC7107CPL-A	OPERATIONAL AMPLIFIER
U002	LM336Z2.5	2.5V REFERENCE DIODE
U003	LM339N	QUAD COMPARATOR
U004	MC14011BCP	QUAD 2-INPUT NAND GATE
U031	TSC7107CPL-A	OPERATIONAL AMPLIFIER
U032	LM336Z2.5	2.5V REFERENCE DIODE
VR001	R12-3518-05	RES. SEMI FIXED 10K B
VR002	R12-0568-05	RES. SEMI FIXED 500
VR003	R12-0556-05	RES. SEMI FIXED 100 B
VR031	R12-3518-05	RES. SEMI FIXED 10K B
VR032	R12-0568-05	RES. SEMI FIXED 500

## AMPLIFIER UNIT (PD110-3/3D/5/5D)

### X77-1400-04

REF.NO	PARTS NO	NAME & DESCRIPTION
	J19-1641-14	HOLDER FOR LED
	J25-5158-23	PCB (UNMOUNTED)
C001	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C002	NO USE	
C003	CK45B1H102K	CAP. CERAMIC 1000P 10% 50V
C004	CF92V1H103J	CAP. POLYESTER 0.01 5% 50V
C007	CE04W1H470M	CAP. ELECTRO 47 20% 50V
D001	DSA1A2	DIODE
D002	DSA1A2	DIODE
D003	DSA1A2	DIODE
D004	DSA1A2	DIODE
D005	RD6.2EB3	DIODE
D006	1SS132	DIODE
D007	1SS132	DIODE
D008	1SS132	DIODE
D009	1SS132	DIODE
D010	CSM2B2A30	SCR
D011	DSA1A2	DIODE
D012	1SS132	DIODE
D013	LN222RP	LED
D014	DSA1A2	DIODE
D015	DSA1A2	DIODE
D016	1SS132	DIODE
D017	1SS132	DIODE
P005	E40-0273-05	PIN CONNECTOR 2 P
P006	E40-1373-05	PIN CONNECTOR 13 P
P007	E40-0273-05	PIN CONNECTOR 2 P
P008	E40-0373-05	PIN CONNECTOR 3 P
P009	E40-0273-05	PIN CONNECTOR 2 P
P010	E40-0273-05	PIN CONNECTOR 2 P
P011	E40-0273-05	PIN CONNECTOR 2 P
P012	E40-0273-05	PIN CONNECTOR 2 P
P302	E40-0273-05	PIN CONNECTOR 2 P
P303	NO USE	
P304	E40-0273-05	PIN CONNECTOR 2 P
P305	E40-0273-05	PIN CONNECTOR 2 P
Q001	2SC2481(O)	TR. SI. NPN
Q002	2SA1175(F)	TR. SI. PNP
Q003	2SC2785(F)	TR. SI. NPN
Q004	2SC2785(F)	TR. SI. NPN
Q005	2SA1175(F)	TR. SI. PNP
R001	RD14BB3A102J	RES. CARBON 1K 5% 1W
R002	CE04W1C101M	CAP. ELECTRO 100 20% 16V
R002	RD14BB3A102J	RES. CARBON 1K 5% 1W
R003	RN14BE2E3831D	RES. METAL FILM 3.83K 0.5% 1/4W
R004	RN14BE2H4022D	RES. METAL FILM 40.2K0.5% 1/2W
R005	CE04W1C101M	CAP. ELECTRO 100 20% 16V

REF.NO	PARTS NO	NAME & DESCRIPTION
R005	RN14BC2E2200F	RES. METAL FILM 220 1% 1/4W
R006	CE04W1C101M	CAP. ELECTRO 100 20% 16V
R006	RN14BC2E1000F	RES. METAL FILM 100 1% 1/4W
R007	RN14BC2H7500F	RES. METAL FILM 750 1% 1/2W
R008	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R009	RD14BB2C392J	RES. CARBON 3.9K 5% 1/6W
R010	RD14BB2C471J	RES. CARBON 470 5% 1/6W
R011	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R012	RD14BB2C272J	RES. CARBON 2.7K 5% 1/6W
R013	RD14BB2C471J	RES. CARBON 470 5% 1/6W
R014	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R015	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R016	RD14BB2C223J	RES. CARBON 22K 5% 1/6W
R017	RD14BB2C103J	RES. CARBON 10K 5% 1/6W
R018	RD14BB2C221J	RES. CARBON 220 5% 1/6W
R019	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R020	RD14BB2C362J	RES. CARBON 3.6K 5% 1/6W
R021	RD14BB2C182J	RES. CARBON 1.8K 5% 1/6W
R022	RD14BB2C621J	RES. CARBON 620 5% 1/6W
R023	RD14BB2C101J	RES. CARBON 100 5% 1/6W
R024	RD14BB2H222J	RES. CARBON 2.2K 5% 1/2W
R025	RD14BB2H102J	RES. CARBON 1K 5% 1/2W
R026	RD14BB2C103J	RES. CARBON 10K 5% 1/6W
R027	RD14BB2C512J	RES. CARBON 5.1K 5% 1/6W
R028	RD14BB2C361J	RES. CARBON 360 5% 1/6W
R031	RN14BE2H4022D	RES. METAL FILM 40.2K0.5% 1/2W
R032	RD14BB2C183J	RES. CARBON 18K 5% 1/6W
R033	RD14BB2C272J	RES. CARBON 2.7K 5% 1/6W
R034	RD14BB2E162J	RES. CARBON 1.6K 5% 1/4W
S001	S40-1519-05	PUSH SWITCH
S002	S40-1518-05	PUSH SWITCH
S003	S40-1518-05	PUSH SWITCH
U001	NJM311D	COMPARATOR
U002	UPC4558C	OPERATIONAL AMPRIPIER
VR001	R12-1524-05	RES. SEMI FIXED 2.5K

# PARTS LIST

## CURRENT DIFECTER UNIT (PD110-5)

### X81-1850-02

REF.NO	PARTS NO	NAME & DESCRIPTION
	J25-5135-14	PCB (UNMOUNTED)
	212-1018-05	TUBE (PLASTIC)
J011	E23-0555-05	G. TERMINAL
J012	E23-0555-05	G. TERMINAL
J013	E23-0555-05	G. TERMINAL
P207	E40-0273-05	PIN CONNECTOR 2 P
P208	E40-0373-05	PIN CONNECTOR 3 P
R010	R92-1173-05	RES. FIXED

## CURRENT DIFECTER UNIT (PD110-5D)

### X81-1850-03

REF.NO	PARTS NO	NAME & DESCRIPTION
	J25-5135-14	PCB (UNMOUNTED)
	212-1018-05	TUBE (PLASTIC)
J011	E23-0555-05	G. TERMINAL
J012	E23-0555-05	G. TERMINAL
J013	E23-0555-05	G. TERMINAL
P205	E40-0273-05	PIN CONNECTOR 2 P
P206	NO USE	
P207	E40-0273-05	PIN CONNECTOR 2 P
P208	E40-0373-05	PIN CONNECTOR 3 P
R010	R92-1173-05	RES. FIXED

## CURRENT DIFECTER UNIT (P110-3)

### X81-1850-04

REF.NO	PARTS NO	NAME & DESCRIPTION
	J25-5135-14	PCB (UNMOUNTED)
	212-1018-05	TUBE (PLASTIC)
J011	E23-0555-05	G. TERMINAL
J012	E23-0555-05	G. TERMINAL
J013	E23-0555-05	G. TERMINAL
P207	E40-0273-05	PIN CONNECTOR 2 P
P208	E40-0373-05	PIN CONNECTOR 3 P
R010	R92-1174-05	RES. FIXED

## CONSTANT I UNIT (PD110-5/5D)

### X81-1980-09

REF.NO	PARTS NO	NAME & DESCRIPTION
	J25-5135-14	PCB (UNMOUNTED)
	212-1018-05	TUBE (PLASTIC)
J011	E23-0555-05	G. TERMINAL
J012	E23-0555-05	G. TERMINAL
J013	E23-0555-05	G. TERMINAL
P205	E40-0273-05	PIN CONNECTOR 2 P
P206	NO USE	
P207	E40-0273-05	PIN CONNECTOR 2 P
P208	E40-0373-05	PIN CONNECTOR 3 P
R010	R92-1174-05	RES. FIXED

## CONSTANT I UNIT (PD110-3/3D)

### X81-1980-11

REF.NO	PARTS NO	NAME & DESCRIPTION
	E33-4110-00	WIRE ASSY
	J25-5157-03	PCB (UNMOUNTED)
	212-1018-05	TUBE (PLASTIC)
C014	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
D015	RD24F(B2)	DIODE
D016	RD24F(B2)	DIODE
D033	CRDE-501	DIODE
P013	E40-0673-05	PIN CONNECTOR 6 P
P307	E40-0773-05	PIN CONNECTOR 7 P
P308	E40-0873-05	PIN CONNECTOR 8 P
P309	E40-0473-05	PIN CONNECTOR 4 P
P310	E40-0473-05	PIN CONNECTOR 4 P
P311	E40-0273-05	PIN CONNECTOR 2 P
P312	E40-0373-05	PIN CONNECTOR 3 P
Q007	2SC3182(R)	TR. SI, NPN
Q008	2SA1265(R)	TR. SI, PNP
Q009	2SC3066(F,G)	TR. SI, NPN
R009	RD14DB2H101J	RES. CARBON 100 5% 1/2W
R015	RD14DB3F912J	RES. CARBON 9.1K 5% 3W
R016	RD14DB3F912J	RES. CARBON 9.1K 5% 3W
R017	NO USE	
R018	RD14BB2C432J	RES. CARBON 4.3K 5% 1/6W
R019	RD14DB2H330J	RES. CARBON 33 5% 1/2W
R020	NO USE	
R021	R92-0150-05	JUMPING RES. ZERO OHM
R022	RD14BB2C102J	RES. CARBON 1K 5% 1/6W

## RECTIFIER UNIT (PD110-5/5D)

### X81-2110-00

REF.NO	PARTS NO	NAME & DESCRIPTION
	E33-4110-00	WIRE ASSY
	J25-5157-03	PCB (UNMOUNTED)
	212-1018-05	TUBE (PLASTIC)
C014	CF92V1H473J	CAP. POLYESTER 0.047 5% 50V
D015	RD24F(B2)	DIODE
D016	RD24F(B2)	DIODE
D033	CRDE-501	DIODE
P013	E40-0673-05	PIN CONNECTOR 6 P
P307	E40-0773-05	PIN CONNECTOR 7 P
P308	E40-0873-05	PIN CONNECTOR 8 P
P309	E40-0473-05	PIN CONNECTOR 4 P
P310	E40-0473-05	PIN CONNECTOR 4 P
P311	E40-0273-05	PIN CONNECTOR 2 P
P312	E40-0373-05	PIN CONNECTOR 3 P
Q007	2SC3182(R)	TR. SI, NPN
Q008	2SA1265(R)	TR. SI, PNP
Q009	2SC3066(F,G)	TR. SI, NPN
R009	RD14DB2H101J	RES. CARBON 100 5% 1/2W
R015	RD14DB3F912J	RES. CARBON 9.1K 5% 3W
R016	RD14DB3F912J	RES. CARBON 9.1K 5% 3W
R017	NO USE	
R018	RD14BB2C432J	RES. CARBON 4.3K 5% 1/6W
R019	RD14DB2H330J	RES. CARBON 33 5% 1/2W
R020	NO USE	
R021	R92-0150-05	JUMPING RES. ZERO OHM
R022	RD14BB2C102J	RES. CARBON 1K 5% 1/6W

# PARTS LIST

## RECTIFIER UNIT (PD110-3/3D)

### X81-2110-01

REF. NO	PARTS NO	NAME & DESCRIPTION
	E33-4117-00	WIRE ASSY
	J25-5164-03	PCB (UNMOUNTED)
	212-1018-05	TUBE (PLASTIC)
C001	CC45SL1H331J	CAP. CERAMIC 330P 5% 50V
C002	CC45SL1H331J	CAP. CERAMIC 330P 5% 50V
C003	CC45SL1H331J	CAP. CERAMIC 330P 5% 50V
C004	CC45SL1H331J	CAP. CERAMIC 330P 5% 50V
C005	CC45SL1H331J	CAP. CERAMIC 330P 5% 50V
C008	CF93AN2J103K	CAP. POLYESTER 0.01 10% 630V
C009	CF93AN2J103K	CAP. POLYESTER 0.01 10% 630V
C010	NO USE	
C011	CE04W1E220M	CAP. ELECTRO 22 20% 25V
C012	CE04W1E220M	CAP. ELECTRO 22 20% 25V
C013	CE04W1E220M	CAP. ELECTRO 22 20% 25V
C014	CE04W1E220M	CAP. ELECTRO 22 20% 25V
C015	CK45F1H103Z	CAP. CERAMIC 0.01 50V
C016	CK45F1H103Z	CAP. CERAMIC 0.01 50V
C017	CK45F1H103Z	CAP. CERAMIC 0.01 50V
C018	CK45F1H103Z	CAP. CERAMIC 0.01 50V
D005	CTM-36R	DIODE
D006	CTM-36R	DIODE
D016	DSA1A4	DIODE
D021	1SS132	DIODE
D022	1SS132	DIODE
D023	1SS132	DIODE
D024	1SS132	DIODE
D025	1SS132	DIODE
D026	1SS132	DIODE
D027	1SS132	DIODE
D028	1SS132	DIODE
D029	1SS132	DIODE
D030	1SS132	DIODE
J001	E23-0555-05	G. TERMINAL
J002	E23-0555-05	G. TERMINAL
J003	E23-0555-05	G. TERMINAL
J004	E23-0555-05	G. TERMINAL
J005	E23-0555-05	G. TERMINAL
J006	E23-0555-05	G. TERMINAL
J007	E23-0555-05	G. TERMINAL
J008	E23-0555-05	G. TERMINAL
J009	E23-0556-05	G. TERMINAL
J014	E23-0556-05	G. TERMINAL
L001	L39-0525-05	COIL
P021	E40-0373-05	PIN CONNECTOR 3 P
P022	E40-0273-05	PIN CONNECTOR 2 P
P023	E40-0673-05	PIN CONNECTOR 6 P
P206	E40-0273-05	PIN CONNECTOR 2 P
Q001	2SK387	FET, N-CHANNEL
Q002	2SK387	FET, N-CHANNEL
Q003	2SK387	FET, N-CHANNEL
Q004	2SK387	FET, N-CHANNEL
Q005	2SK387	FET, N-CHANNEL
R001	R92-1185-05	RES. FIXED
R002	R92-1185-05	RES. FIXED
R003	R92-1185-05	RES. FIXED
R004	R92-1185-05	RES. FIXED
R005	R92-1185-05	RES. FIXED
R006	RD14BB2C302J	RES. CARBON 3K 5% 1/6W
R007	RD14DB2H101J	RES. CARBON 100 5% 1/2W
R013	RD14DB3A101J	RES. CARBON 100 5% 1W
R014	RD14DB3A101J	RES. CARBON 100 5% 1W
R019	R92-0150-05	JUMPING RES. ZERO OHM
R020	R92-0150-05	JUMPING RES. ZERO OHM
R021	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R022	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R023	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R024	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R025	RD14BB2C102J	RES. CARBON 1K 5% 1/6W

REF. NO	PARTS NO	NAME & DESCRIPTION
R026	RD14BB2C432J	RES. CARBON 4.3K 5% 1/6W
R027	RD14BB2C432J	RES. CARBON 4.3K 5% 1/6W
R028	RD14BB2C432J	RES. CARBON 4.3K 5% 1/6W
R029	RD14BB2C432J	RES. CARBON 4.3K 5% 1/6W
R030	RD14BB2C432J	RES. CARBON 4.3K 5% 1/6W
R031	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R032	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R033	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R034	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R035	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R036	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R037	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R038	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R039	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R040	RD14BB2C102J	RES. CARBON 1K 5% 1/6W
R041	RD14BB2C103J	RES. CARBON 10K 5% 1/6W
R042	RD14BB2C103J	RES. CARBON 10K 5% 1/6W
R043	RD14BB2C103J	RES. CARBON 10K 5% 1/6W
R044	RD14BB2C103J	RES. CARBON 10K 5% 1/6W
R045	RD14BB2C103J	RES. CARBON 10K 5% 1/6W
U001	NJM4558D	IC, OP AMP
U002	NJM4558D	IC, OP AMP
U003	NJM4558D	IC, OP AMP

# PARTS LIST

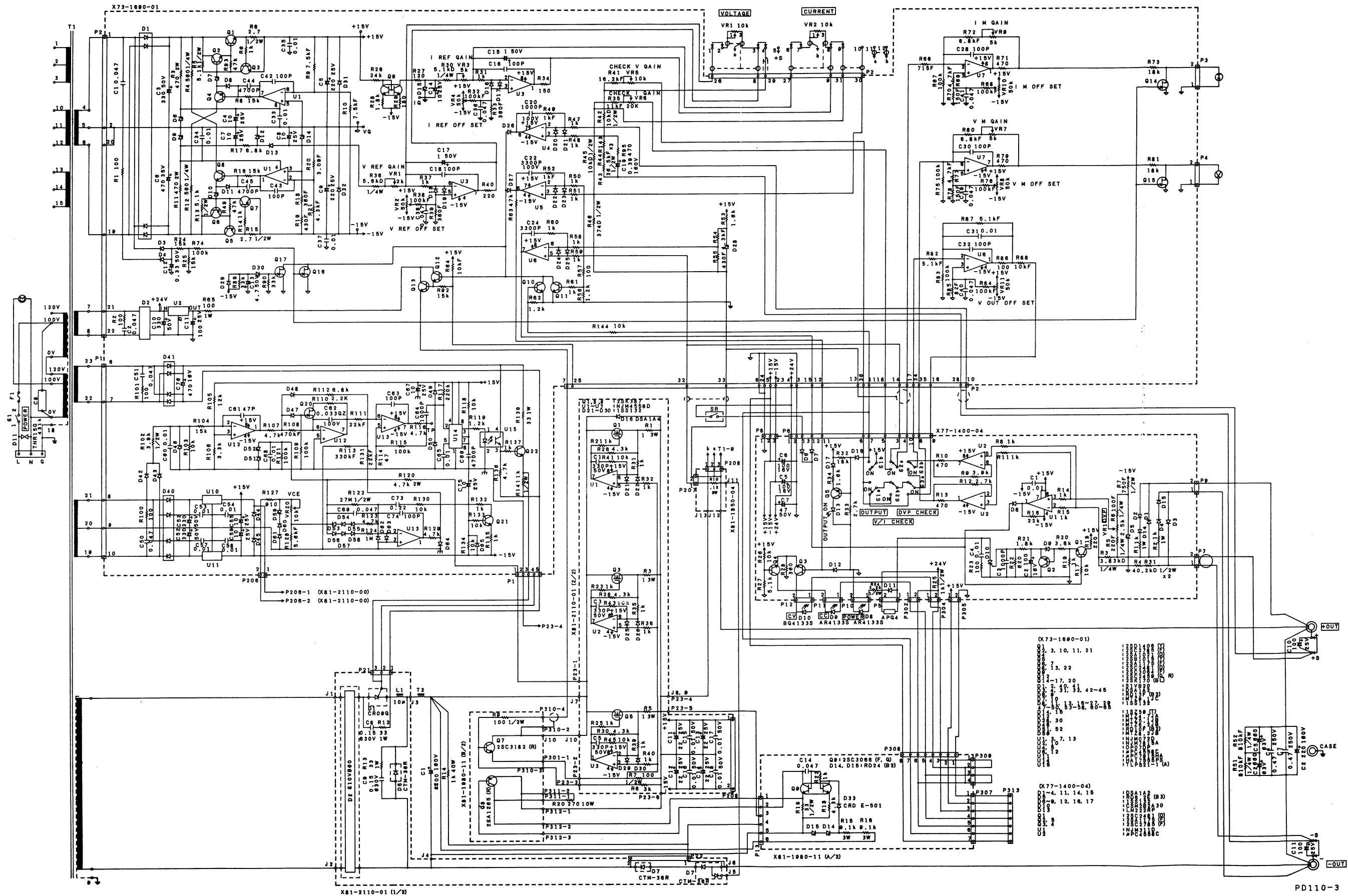
## CURRENT DIFECTER UNIT (PD110-3D)

X81-1850-05

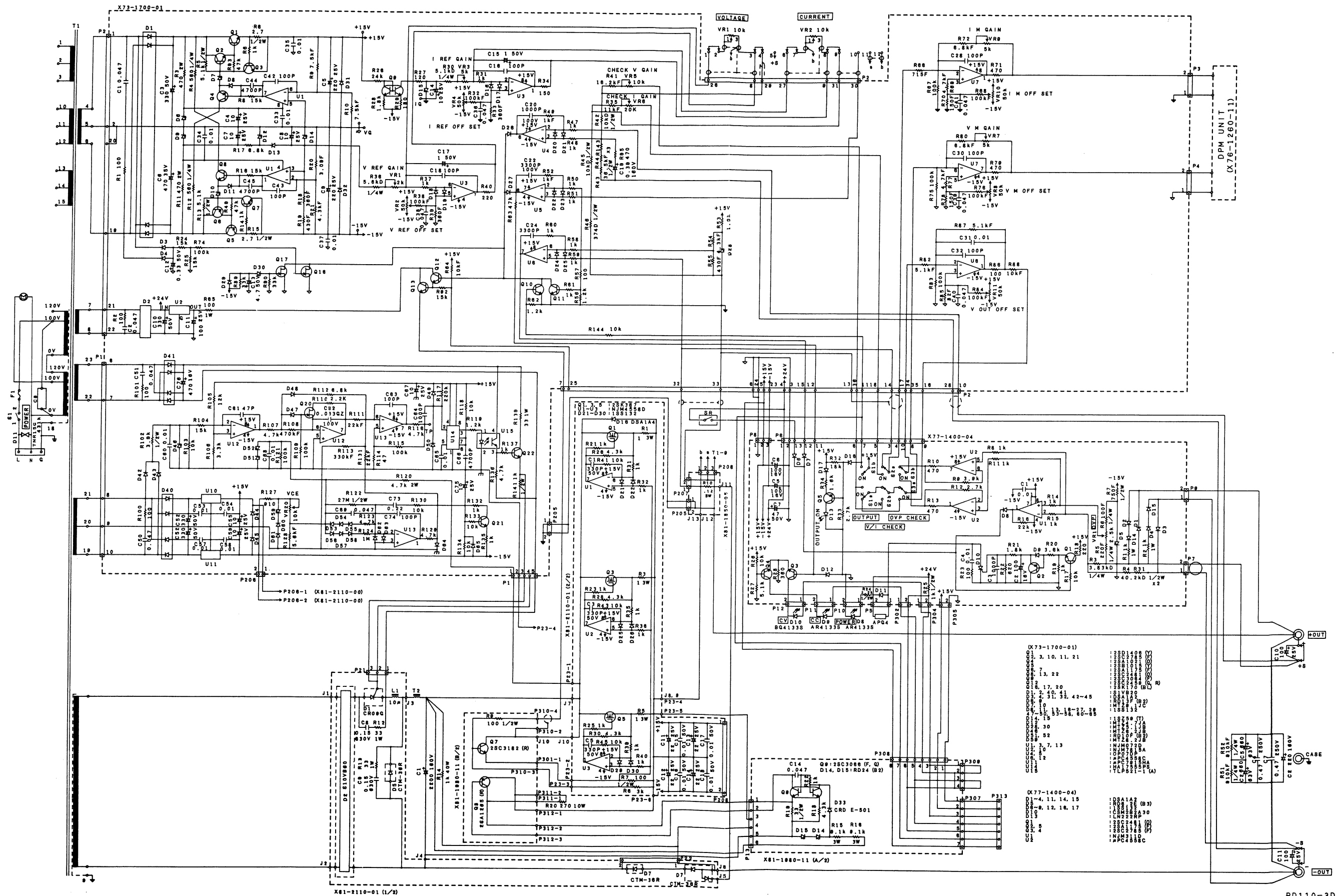
REF.NO	PARTS NO	NAME & DESCRIPTION			
	E33-4117-00	WIRE ASSY			
	J25-5164-03	PCB (UNMOUNTED)			
	212-1018-05	TUBE (PLASTIC)			
C001	CC45SL1H331J	CAP. CERAMIC	330P	5%	50V
C002	NO USE				
C003	CC45SL1H331J	CAP. CERAMIC	330P	5%	50V
C004	NO USE				
C005	CC45SL1H331J	CAP. CERAMIC	330P	5%	50V
C008	CF93AN2J103K	CAP. POLYESTER	0.01	10%	630V
C009	CF93AN2J103K	CAP. POLYESTER	0.01	10%	630V
C010	NO USE				
C011	CE04W1E220M	CAP. ELECTRO	22	20%	25V
C012	CE04W1E220M	CAP. ELECTRO	22	20%	25V
C013	CE04W1E220M	CAP. ELECTRO	22	20%	25V
C014	CE04W1E220M	CAP. ELECTRO	22	20%	25V
C015	CK45F1H103Z	CAP. CERAMIC	0.01		50V
C016	CK45F1H103Z	CAP. CERAMIC	0.01		50V
C017	CK45F1H103Z	CAP. CERAMIC	0.01		50V
C018	CK45F1H103Z	CAP. CERAMIC	0.01		50V
D005	CTM-36R	DIODE			
D006	CTM-36R	DIODE			
D016	DSA1A4	DIODE			
D021	1SS132	DIODE			
D022	1SS132	DIODE			
D025	1SS132	DIODE			
D026	1SS132	DIODE			
D029	1SS132	DIODE			
D030	1SS132	DIODE			
J001	E23-0555-05	G. TERMINAL			
J002	E23-0555-05	G. TERMINAL			
J003	E23-0555-05	G. TERMINAL			
J004	E23-0555-05	G. TERMINAL			
J005	E23-0555-05	G. TERMINAL			
J006	E23-0555-05	G. TERMINAL			
J007	E23-0555-05	G. TERMINAL			
J008	E23-0555-05	G. TERMINAL			
J009	E23-0556-05	G. TERMINAL			
J014	E23-0556-05	G. TERMINAL			
L001	L39-0525-05	COIL			
P021	E40-0373-05	PIN CONNECTOR	3 P		
P022	E40-0273-05	PIN CONNECTOR	2 P		
P023	E40-0673-05	PIN CONNECTOR	6 P		
P206	E40-0273-05	PIN CONNECTOR	2 P		
Q001	2SK387	FET, N-CHANNEL			
Q002	NO USE				
Q003	2SK387	FET, N-CHANNEL			
Q004	NO USE				
Q005	2SK387	FET, N-CHANNEL			
R001	R92-1185-05	RES. FIXED			
R002	NO USE				
R003	R92-1185-05	RES. FIXED			
R004	NO USE				
R005	R92-1185-05	RES. FIXED			
R006	RD14BB2C302J	RES. CARBON	3K	5%	1/6W
R007	RD14DB2H101J	RES. CARBON	100	5%	1/2W
R013	RD14DB3A101J	RES. CARBON	100	5%	1W
R014	RD14DB3A101J	RES. CARBON	100	5%	1W
R019	R92-0150-05	JUMPING RES.	ZERO OHM		
R020	R92-0150-05	JUMPING RES.	ZERO OHM		
R021	RD14BB2C102J	RES. CARBON	1K	5%	1/6W
R022	NO USE				
R023	RD14BB2C102J	RES. CARBON	1K	5%	1/6W
R024	NO USE				
R025	RD14BB2C102J	RES. CARBON	1K	5%	1/6W
R026	RD14BB2C432J	RES. CARBON	4.3K	5%	1/6W
R027	NO USE				

REF.NO	PARTS NO	NAME & DESCRIPTION			
R028	RD14BB2C432J	RES. CARBON	4.3K	5%	1/6W
R029	NO USE				
R030	RD14BB2C432J	RES. CARBON	4.3K	5%	1/6W
R031	RD14BB2C102J	RES. CARBON	1K	5%	1/6W
R032	RD14BB2C102J	RES. CARBON	1K	5%	1/6W
R035	RD14BB2C102J	RES. CARBON	1K	5%	1/6W
R036	RD14BB2C102J	RES. CARBON	1K	5%	1/6W
R039	RD14BB2C102J	RES. CARBON	1K	5%	1/6W
R040	RD14BB2C102J	RES. CARBON	1K	5%	1/6W
R041	RD14BB2C103J	RES. CARBON	10K	5%	1/6W
R042	NO USE				
R043	RD14BB2C103J	RES. CARBON	10K	5%	1/6W
R044	NO USE				
R045	RD14BB2C103J	RES. CARBON	10K	5%	1/6W
U001	NJM4558D	IC, OP AMP			
U002	NJM4558D	IC, OP AMP			
U003	NJM4558D	IC, OP AMP			

# SCHEMATIC DIAGRAM (PD110-3)

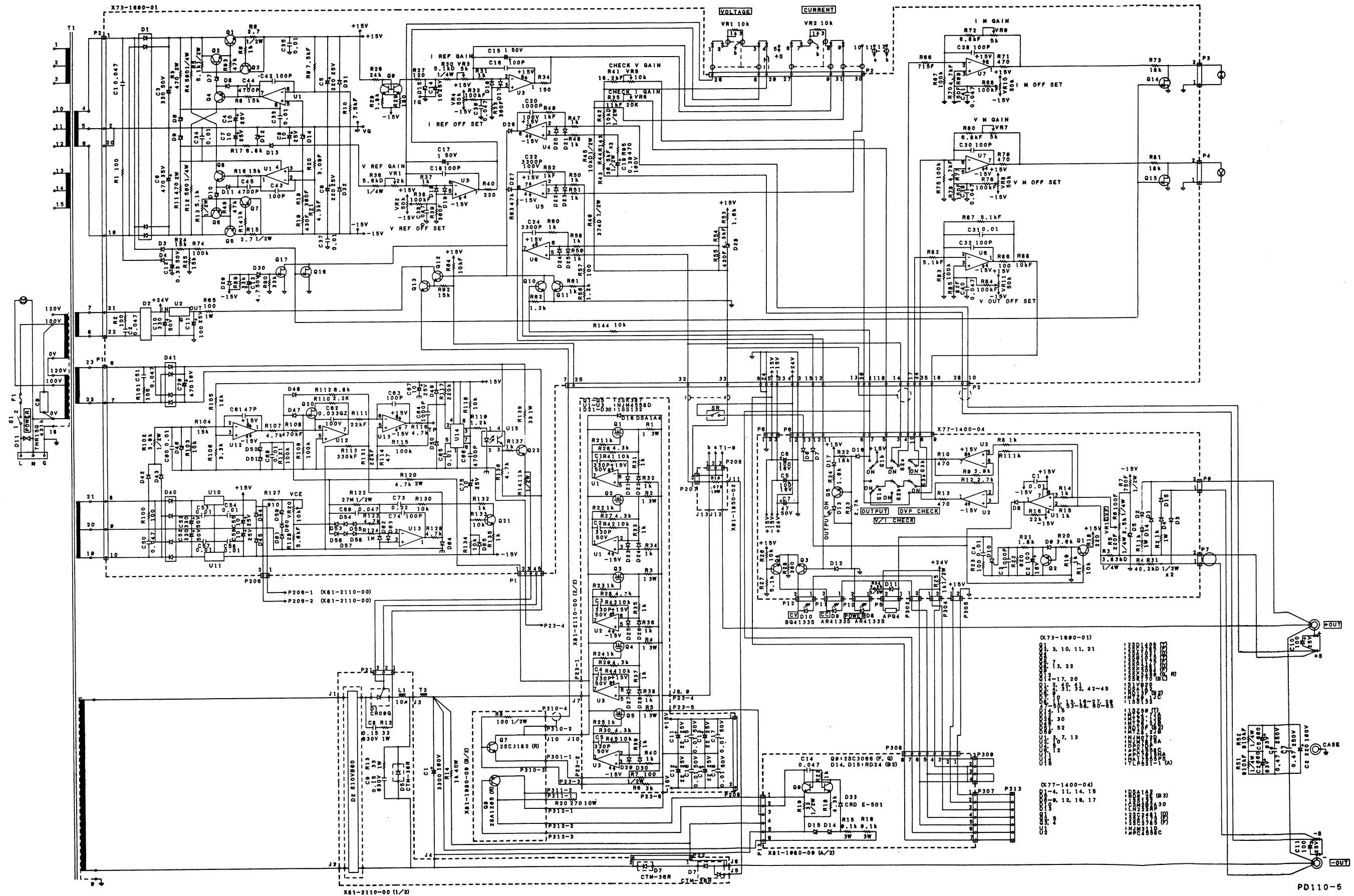


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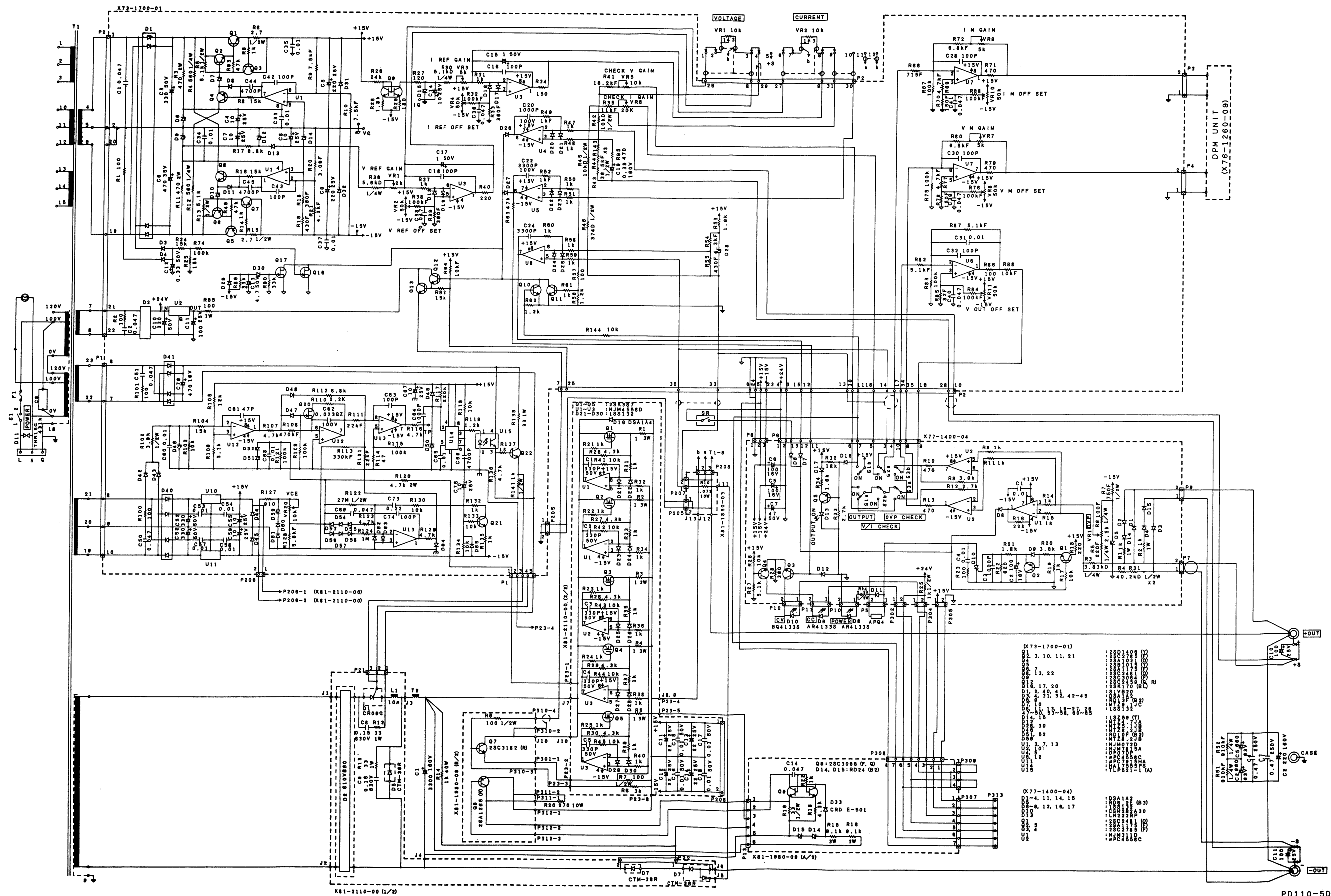




# SCHEMATIC DIAGRAM (PD110-5)

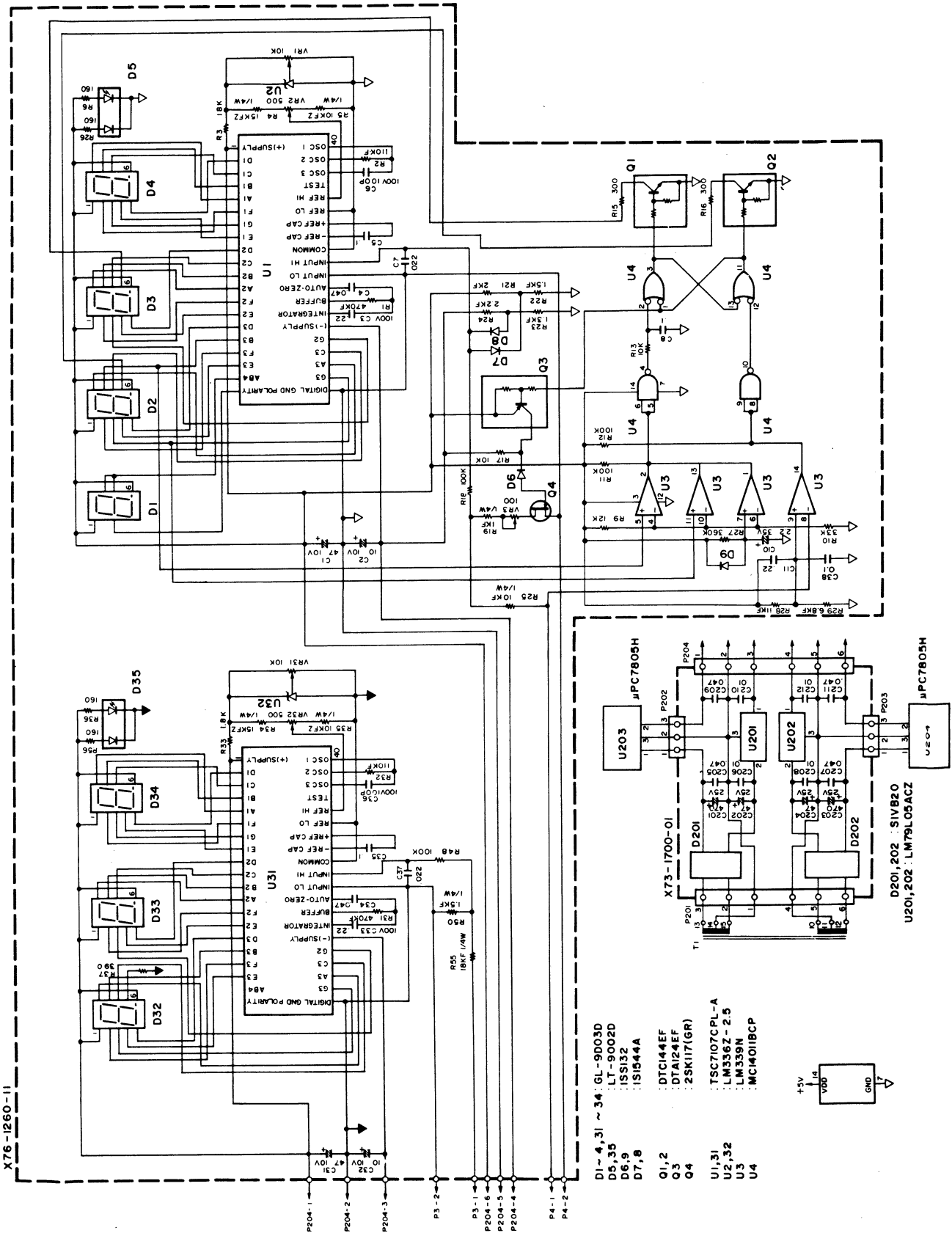


## SCHEMATIC DIAGRAM (PD110-5D)



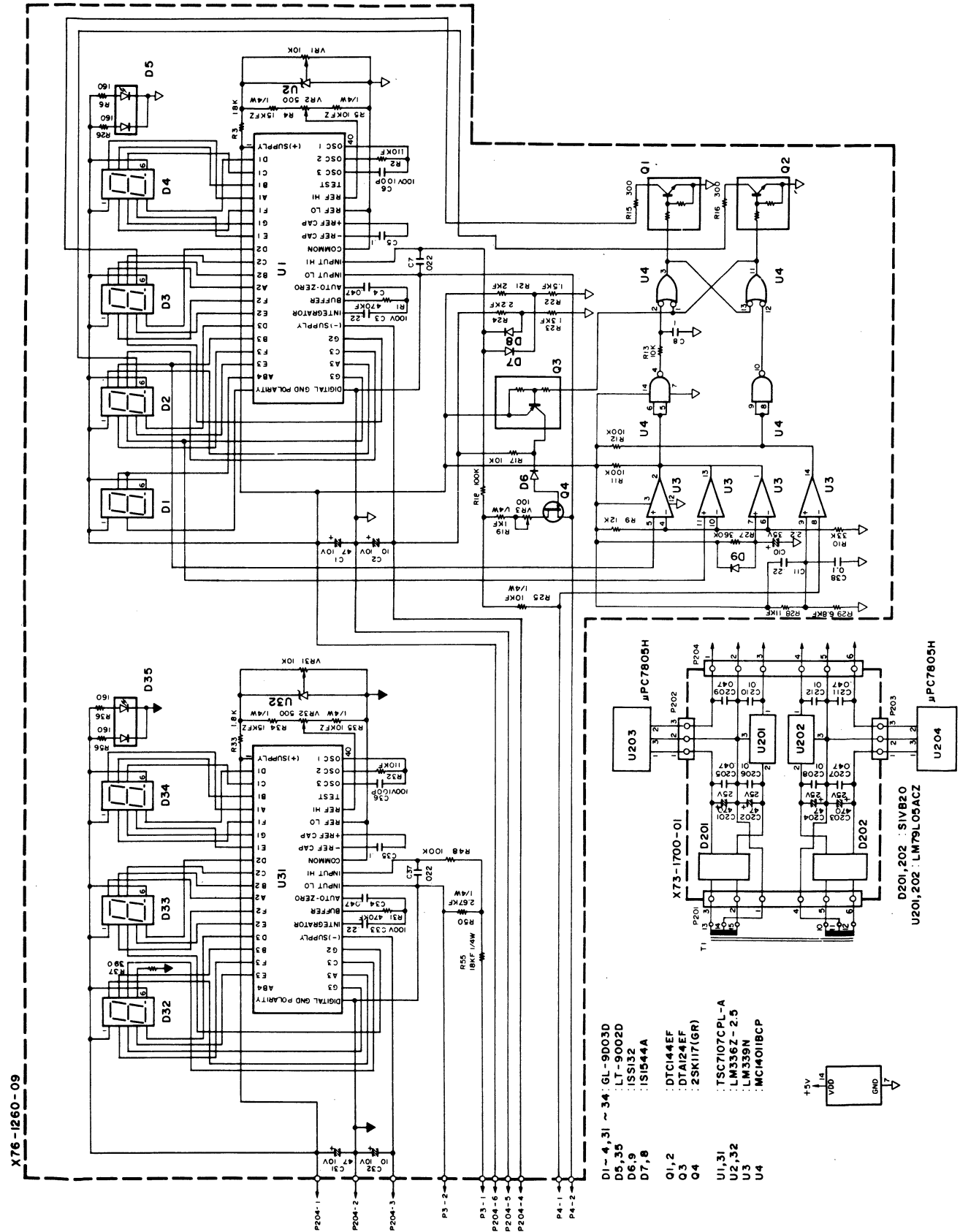
# SCHEMATIC DIAGRAM (PD110-3D)

X76-1260-11



# SCHEMATIC DIAGRAM (PD110-5D)

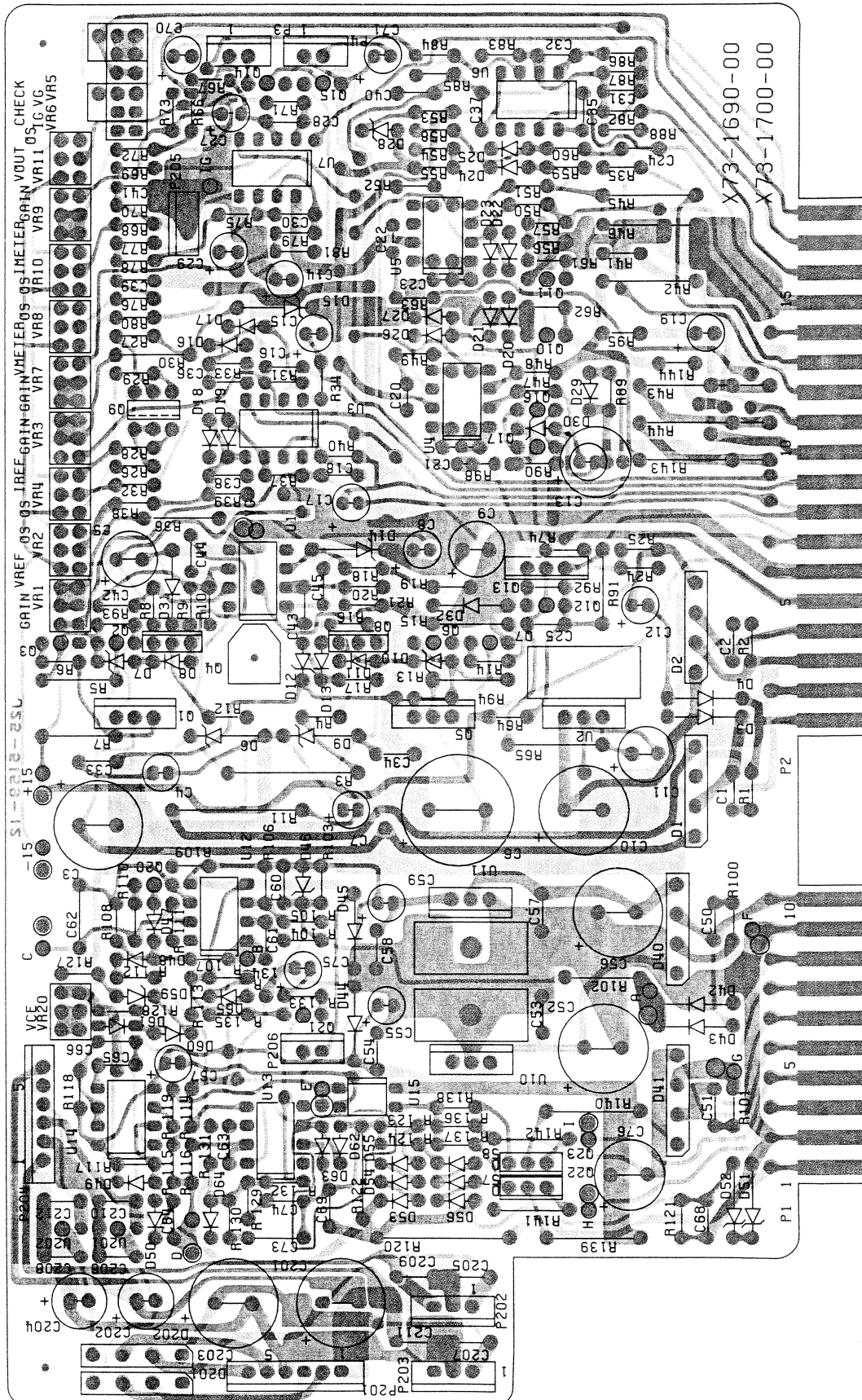
X76-1260-09



# P. C. BOARD

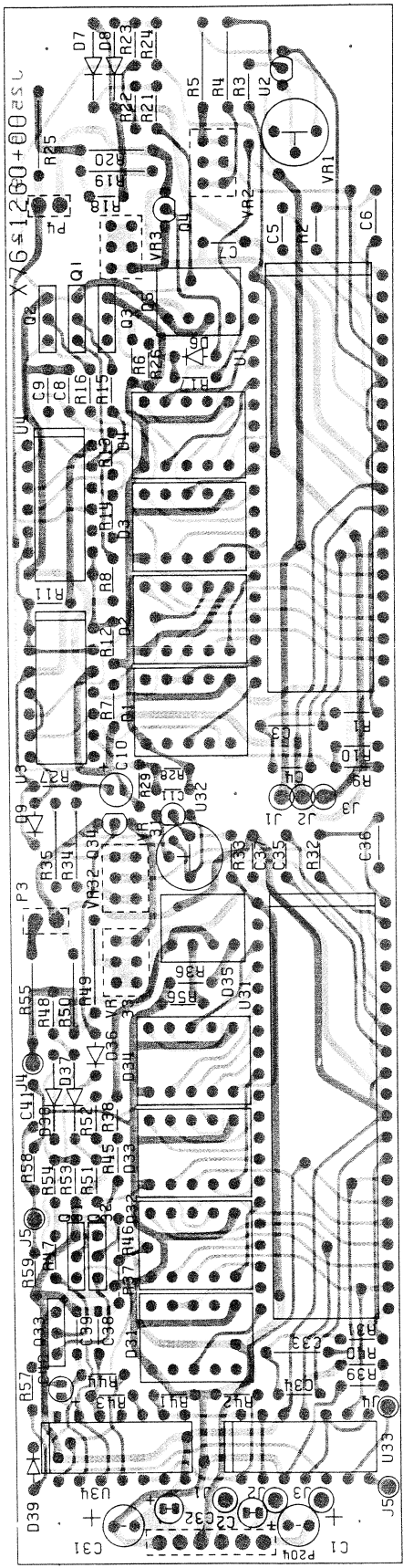
## AMPLIFIER UNIT

(X73-1690-01/PD110-3/5) (X73-1700-01/PD110-3D/5D)

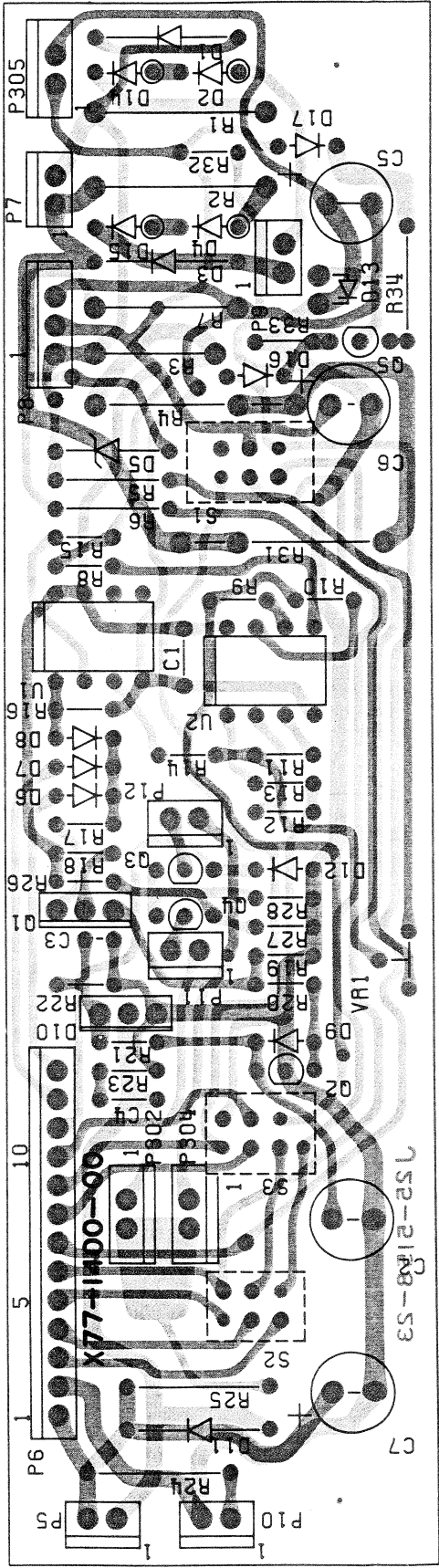


# P. C. BOARD

DIGITAL PANEL METER UNIT  
(X76-1260-11/PD110-3D)  
(X76-1260-09/PD110-5D)



AMPLIFIER UNIT  
(X77-1400-04)

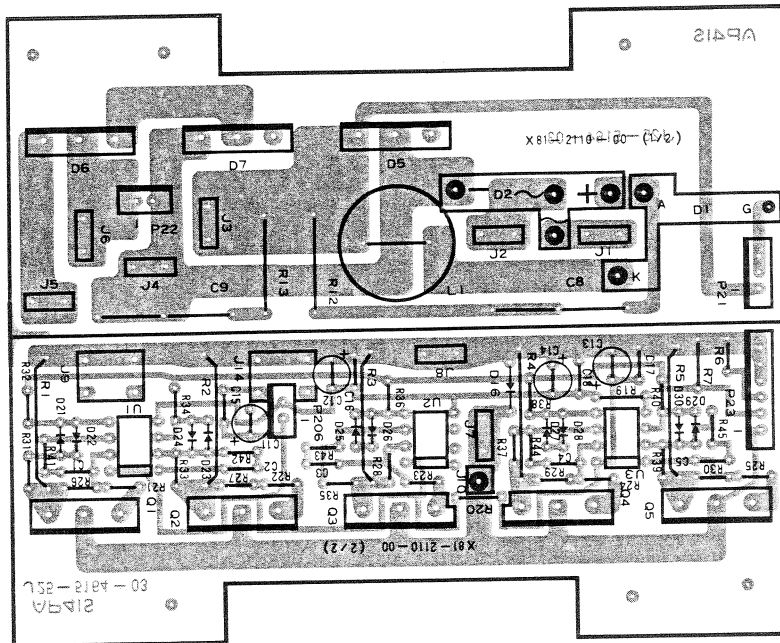




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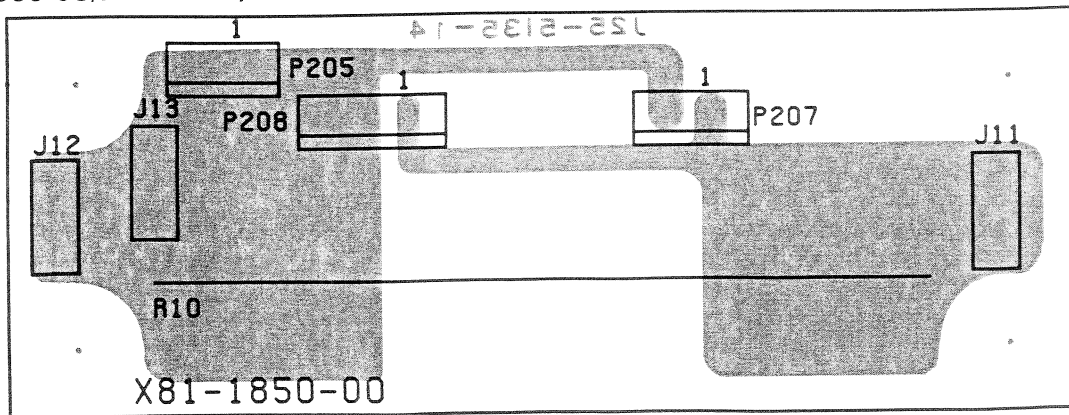
## RECTIFIER UNIT

(X81-2110-00/PD110-5/5D) (X81-2110-01/PD110-3/3D)



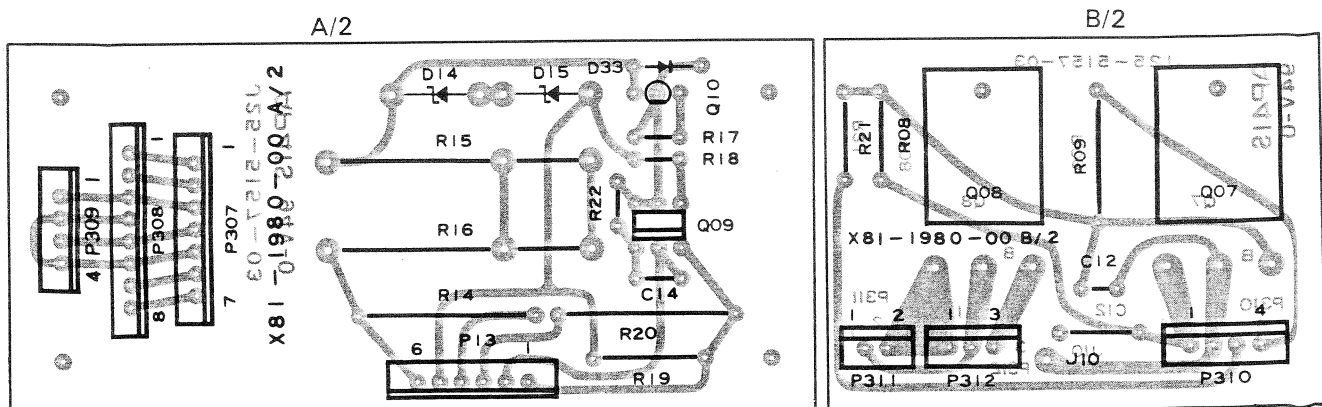
## CURRENT DIFECTOR UNIT

(X81-1850-02/PD110-5) (X81-1850-04) (DP110-3)  
(X81-1850-03/PD110-5D) (X81-1850-05) (PD110-3D)



## CONSTANT I UNIT

(X81-1980-09/PD110) (X81-1980-11/PD110-3/3D)



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**KENWOOD CORPORATION**  
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